WELCOME

The shape of a *hand.*

The expanded Lantern Poker Field Guide.

Lars Rocha

One hundred eighty pages.
Thirty-two lessons.
Seventy-two worked decisions.

A complete first course in patterns, price and possibility.

PYTOOLZX / WSRF · LANTERN POKER
Fourth edition · Expanded manual

WELCOME

A complete first course

Read a little. Try a hand. Return with a question.

Part	Pages	Purpose
Foundations	5–36	Thirty-two lessons with worked questions
Decision laboratory	37–108	Seventy-two decisions at two, six and nine seats
Zone journeys	109–148	Forty boards across all streets
Experiments	149–172	Twenty-four controlled comparisons
Training and reference	173–180	Methods, results and sources
Complete companion	Separate 300-page atlas	Every rank pair, more cases, journeys, experiments and training receipts

This edition expands the earlier field guide into a full introductory course. It explains the reference map, the distinction between rank coverage and pot share, practical pricing questions, the information boundary of the adviser, and the way the WSRF models are trained and evaluated.

The decisions, journeys and experiments were drawn from the independently generated atlas collection. They retain the same cards and estimates, so you can continue into the larger book without changing conventions. The refreshed twelve-page quick-start is also available as a separate download.

> **A route for the first evening**
>
> Read the map definitions, the call and bluff lessons, and one heads-up decision. Pause the game before acting, ask for a hint, then name one assumption you would test. You can return to the rest of the course at your own pace.

WELCOME

How to use a worked page

Make the question yours before reading the model's answer.

Start with the visible cards and the active field. Name the made category, then identify the pocket and dynamic references. Read the denominator on every percentage. A share of near ranks, a share of unseen physical cards, and an expected share of the pot are different quantities.

On the page	How to read it
Exact map	Reconstruct the references and count overlap once
MC share	An estimate under the listed range and active opponents
Approximate interval	Sampling uncertainty under that model
WSRF equity	The exported forest's estimate for the same inputs
Action ranking	Learned additional-stack return under continuation policies
Transition count	Exact next-card label changes from the stated known cards

The numerical examples were generated independently of training and tournament decks. Decision pages use the archived v3 action forest so every printed ranking has a stable reference. The companion atlas reports the new candidates separately and explains which policy the games retain.

Selected journey patterns are teaching fixtures, not an estimate of how commonly those patterns occur. The experiment pages vary one stated quantity while keeping the initial pocket and board fixed. Their strength is a clear question and a reproducible calculation.

> **A useful notebook line**
>
> "I expected ___ because ___. I changed ___, and the estimate moved from ___ to ___. The assumption I still need to test is ___." One completed sentence can teach more than copying a large table.

WELCOME

A legend for the whole book

The denominator is part of the idea.

Mark or term	Meaning
0 away	A rank in the reference set
1 away	A circular neighbor of a reference
2 away / 3+ away	Farther rank buckets; 3+ combines all larger distances
LIKELY	At least seven of thirteen ranks are near
UNLIKELY	At most six ranks are near
MC	Monte Carlo estimate
WSRF	Prediction from an exported pytoolzx WSRF forest
BB	One big blind: twenty play chips in the room
Range width	A synthetic weighting parameter, not literal range coverage
Additional chips	Return measured from the current decision; earlier contributions are spent

Ranks are numbered 2=0 through A=12. The four reference expressions are {a, b, (a+b) mod 13, |a−b|}. Distances are circular, but legal straights follow poker rules. Suits do not affect the rank map; they do affect hand strength.

All examples are play-chip studies. A practice peek changes what the human sees, while the adviser continues to use its own pocket and public information. The books explain the implementation rather than assuming every site, HUD or poker program uses the same conventions.

> **Our way of looking**
>
> The joy is a complicated situation becoming readable. A compact map helps you choose where to look next. The recorded experiments keep that curiosity connected to what was actually counted, sampled and learned.

FOUNDATIONS

A way to see the hand

Start with a question you can answer.

A poker hand offers more information than a player can comfortably hold at once: two private cards, a changing board, several stacks, positions, prices, and the actions that brought everyone here. The distance map gives some of that information a compact shape. Its value as a study tool begins when the shape helps you ask a precise question.

Use three passes. First, describe your actual hand and the public board. Second, describe the map: the pocket zone, the dynamic zone, and which ranks are near. Third, price the action. These passes work together. A large near band can coexist with a weak hand, while a small near band can accompany a powerful made hand.

The Lantern room puts these passes beside one another. A WSRF forest estimates showdown share; another compares betting continuations. The player can inspect a tree, request a hint, change a range assumption, and test the spot. Curiosity becomes useful when you can name exactly what changed between two experiments.

Begin gently. Pause before acting, write one sentence about the decision, and compare it with the explanation afterward. The goal of the first session is a repeatable way to think. Winning an individual pot is a pleasant outcome, but explaining the decision is the skill you can carry into the next hand.

Hand → map → people → price

Try it first

You spot a LIKELY label and a high call price. Can exploring your made hand, the people, and the eligible pot help you choose your next move?

Worked answer. Yes. Inspect the actual made hand, opposing range assumptions, active players, and eligible pot. The label alone does not answer whether the call is worth its cost.

FOUNDATIONS

Thirteen ranks, four suits

Keep the rank number separate from the card.

The rank system used here starts at zero: 2=0, 3=1, 4=2, and so on until A=12. A card also has a suit. The rank map uses the first part, while the hand evaluator uses both. This separation is deliberate: it makes rank relationships easy to compare without pretending that a flush is a rank-only event.

For example, 7♠ has rank number 5 and 5♦ has rank number 3. Their numerical values are not the numbers printed on the cards. Write the conversion down until it feels natural. An off-by-two error changes the reference set, and therefore changes every distance that follows.

The 91 pages in the rank atlas cover every unordered pair of ranks, including pairs. When the ranks differ, each page compares suited and offsuit versions. There are 13 pocket-pair classes and 78 distinct unequal-rank pairs. Splitting those 78 into suited and offsuit versions gives the familiar 169 starting-hand classes.

A class is not one equally probable deal. A specific pocket pair has six suit combinations; an unequal suited class has four; an unequal offsuit class has twelve. The atlas gives one representative of each suit-symmetric class. It does not average the 169 classes as though each appears equally often.

$$13 \text{ pairs} + 78 \text{ suited} + 78 \text{ offsuit} = 169 \text{ classes}$$

Try it first

Does an offsuit hand such as AKo have twelve physical combinations to explore?

Worked answer. Yes. Twelve: four choices for the ace suit, then three different choices for the king suit. There are four suited AK combinations.

FOUNDATIONS

Distance around the circle

The shortest route can cross the ace–two seam.

Place the thirteen ranks around a circle in their usual order. The distance between rank numbers a and b is the shorter of the clockwise and counterclockwise routes. In symbols it is min(|a−b|, 13−|a−b|). The largest possible pairwise distance on this odd circle is six.

This convention makes ace and two neighbors in the map. It does not mean that every poker straight wraps around the circle. A-K-Q-J-T is a straight, and A-2-3-4-5 is a straight; Q-K-A-2-3 is not. The circle is the geometry of the feature, while legal poker hands are evaluated by separate rules.

Distance to a reference set means the smallest distance to any reference in that set. If one reference is far away but another is adjacent, the rank is one away. Repeated references do not add extra weight. Four reference expressions can collapse into fewer distinct points.

On each atlas page, the reference points have one color, their immediate neighbors another, and the remaining ranks a third. Trace a route yourself before reading the numerical row. This makes the zero/one/two/three-plus buckets feel like a physical map instead of a memorized label.

$$d(a,b) = \min(|a-b|, 13-|a-b|)$$

Try it first

Can you travel from A to 3 in two circular steps while keeping poker straight rules as a separate guide?

Worked answer. Yes. The map distance is two: A→2→3. Poker straights follow their own five-card sequences; A-2-3-4-5 is the ace-low straight. Keeping both rules clear lets you explore each kind of pattern.

FOUNDATIONS

The four reference expressions

A compact construction, with duplicates removed.

Given the two rank numbers a and b, form the reference set {a, b, (a+b) mod 13, |a−b|}. The first two terms anchor the map to the cards. The sum wraps around the thirteen-rank circle. The difference is the nonnegative separation before taking circular distances to the resulting set.

For 7♠ 5♦, the rank numbers are 5 and 3. The reference numbers are 5, 3, 8, and 2, corresponding to 7, 5, T, and 4. These four locations generate all thirteen distance values. Their immediate neighborhoods overlap, so counting three ranks per reference would overcount the near band.

Pocket pairs provide especially useful examples. If a=b, the difference is zero and the two direct references coincide. Depending on the doubled rank modulo thirteen, the entire reference set can contain only one, two, or three distinct points. A pair can therefore have a narrow map even though its poker strength is substantial.

The reference set is symmetric in its two inputs: exchanging the reference cards does not change it. Suits also do not change the map. Those invariances help you check an implementation. They do not imply that swapping a hole card with a public board card preserves the meaning of the hand.

$$R(a,b) = \{a, b, (a+b) \bmod 13, |a-b|\}$$

Try it first

For 2♣ 2♦, do all four reference expressions meet at one point: rank 2?

Worked answer. Yes. Both rank numbers are zero. Every expression gives zero, so there is one distinct reference point: the rank 2. Its near ranks are A, 2, and 3.

FOUNDATIONS

What LIKELY names

Coverage of the rank circle.

A rank is near when its shortest distance to the reference set is zero or one. The whole reference pair is labeled LIKELY when more than half of the thirteen ranks are near: seven or more. Six or fewer gives UNLIKELY. This book follows the executable LRO convention documented in the source receipt.

The label refers to the size of a rank band. It is not a statement that the player is favored to win, that a particular card is due, or that a bet is profitable. Those questions have different denominators and need different information. Treating all of them as one question makes a compact map less useful.

The word UNLIKELY deserves just as much attention as LIKELY. It identifies a narrower near band, so more rank locations lie farther from the references. An unusual-looking map can help you notice a change that a familiar map hides. In the training data, both labels receive deliberate coverage so the model has examples from each.

A useful habit is to say the full sentence once: “This pair is LIKELY because nine of thirteen ranks are near.” That sentence preserves the definition. Later, you can shorten it to the label while still remembering what was counted.

$$\text{LIKELY} \Leftrightarrow \text{near-rank count} \geq 7$$

Try it first

Your map has six near ranks and your hand is a full house. Can you celebrate that made strength and explore the board, opponents, and price together?

Worked answer. Yes. The map is UNLIKELY by coverage, and the full house brings its own made strength. Explore that strength together with the board, opponents, price, and available actions.

FOUNDATIONS

Two meanings of zone

A rank map and a forest pool are different objects.

The guides use zones to make patterns manageable, and WSRF uses zones to organize learning. In this room these ideas meet, but they are not identical. A LIKELY/UNLIKELY rank label is computed directly from card geometry. A model-routing zone chooses which collection of trees evaluates a feature vector.

The current equity model has eight routing pools: heads-up or multiway, crossed with preflop, flop, turn, or river. Within each pool, both dynamic rank labels appear in training. The LIKELY/UNLIKELY label and coverage values remain explicit features. A tree can use them when a split is useful without requiring separate forests for each label.

A competing design did split the pools again by dynamic label. In the recorded comparison, the shared design performed better among the two zone-aware choices. That result is useful engineering information. A smaller subpool is more specialized, but it also gives each tree fewer examples from which to learn.

When looking at a tree, distinguish the chosen routing pool from a branch inside it. “Table-turn” tells you where the model started. “Dynamic rank coverage ≤ threshold” would be one possible decision within that pool. The vocabulary becomes clearer when those two levels stay separate.

Routing pool ≠ rank-coverage label

Try it first

A six-seat hand reaches the turn with two players active. Does the equity model use its heads-up turn pool?

Worked answer. Yes. The heads-up turn pool, because the prediction is against one active opponent. The original table size remains relevant to other public context; the routing distinction uses the active field.

FOUNDATIONS

Remove the cards you know

A rank count is not an unseen-card count.

A full deck contains four cards of each rank. Once cards are known, those multiplicities change. A nine-rank near band starts with thirty-six physical cards, but some may be in your pocket or on the board. Counting unseen cards requires removing every card known to the observer exactly once.

For the pocket 7♠ 5♦, the near band contains nine ranks. Both pocket cards lie in that band, leaving thirty-four near cards among fifty unseen cards before the flop. Under a uniform unconditioned deck, the next physical card belongs to the near band with probability 34/50, or 68%. Nine thirteenths and thirty-four fiftieths answer related but different questions.

On later streets, update the count from the observer's pocket and public board. Do not remove an opponent's actual private cards merely because a practice peek is visible. The adviser's information boundary stays the same in peek mode. A separate omniscient exercise would need to say explicitly that it assumes those cards are known.

Card removal also changes blockers. Holding a particular ace removes one ace from possible opposing pockets. Holding a heart removes a heart from possible flush combinations. The same act of removal can alter both a distance bucket and a poker range, through different relationships.

Uniform next-card share = cards in bucket ÷ unseen cards

Try it first

With 15 bucket cards among 47 unseen cards, is the uniform next-card bucket share 15/47, about 31.91%?

Worked answer. Yes. 15/47, about 31.91%. This is a bucket event. It becomes a winning-out calculation only if every counted card has been checked against the relevant opposing hands.

FOUNDATIONS

Pocket map, moving map

Choose the reference frame before reading the color.

The pocket map always uses the player's two hole cards as references. The dynamic map starts with those cards, then uses the last two revealed board cards. At the flop it uses flop cards two and three. At the turn it uses flop card three and the turn. At the river it uses the turn and river.

That convention gives a simple, reproducible sequence. It also means the order of the flop cards matters to the dynamic map even though the three-card flop is simultaneous information for ordinary poker decisions. The book preserves the displayed dealing order and states it in each journey. The dynamic label should not be mistaken for an order-invariant property of the board.

A stable pocket map lets you ask how the board moves relative to your original hand. A dynamic map lets you ask how the newest local pair reshapes the circle. Reading both gives a useful comparison: did the local geometry change while the original anchor stayed broad, or did a narrow pocket map remain narrow throughout?

Before a flop, the dynamic update arrives as a whole flop in this convention: three board cards arrive together. The exact next-card transition counts in the journeys therefore begin after the flop. Preflop-to-flop changes are explored through sampled whole flops, not a misleading one-card shortcut.

Pocket: fixed holes · Dynamic: last two revealed cards

Try it first

On A♣ K♦ 2♥ / 9♥, do 2♥ and 9♥ anchor the dynamic map at the turn?

Worked answer. Yes. 2♥ and 9♥. At the flop the dynamic references were K♦ and 2♥. The pocket map still uses your original hole cards.

FOUNDATIONS

Where the board sits

Alignment is a third question.

Pocket coverage asks how much of the rank circle lies near the pocket references. Dynamic coverage asks the same question around the newest reference pair. Board alignment asks whether a majority of the revealed board ranks lie near the pocket references. These can disagree without any contradiction.

Count board cards, including repeated ranks, when measuring alignment. On a paired board, two cards of the paired rank are two observations of that rank. If both are near, both contribute to the majority. This makes alignment a description of the visible board, rather than a second calculation of the number of distinct near ranks.

A board-majority label uses a strict majority in this implementation. A two-near, two-far turn board does not have a near majority. Before the flop the board is undealt, so asking for its alignment has its observations still ahead. An empty board should not be read as evidence of disagreement.

Try saying three independent sentences: “My pocket covers nine ranks. The dynamic pair covers five. Two of the three flop cards are near my pocket.” Each sentence describes a different count. Keeping them separate makes it much easier to understand a tree split or to reproduce an example by hand.

$$\text{Alignment} = \text{near board cards} \div \text{revealed board cards}$$

Try it first

A turn board has two near and two far cards. Is its near alignment exactly half, with a strict majority beginning above half?

Worked answer. Yes. Two of four is exactly half, and the rule requires more than half. The pocket and dynamic coverage labels must be calculated separately.

FOUNDATIONS

Compression without lost honesty

A smaller vocabulary is a thinking tool.

The distance map compresses thirteen rank locations into a few distance categories. Compression can be useful because it makes comparisons easier to remember. It necessarily discards detail: two different ranks can land in the same bucket, and suits are omitted entirely.

For a uniform choice among fifty unseen cards, the uncertainty of the physical card identity is $\log_2(50)$, about 5.64 bits. Naming a distance bucket is a coarser observation. It can have fewer possible labels, but that does not mean the underlying card became predictable. The identity information was grouped, not created.

The interesting empirical question is whether a compact feature helps a model learn a useful regularity with available data. This is tested by comparing feature sets on held-out examples. In the recorded equity experiment, the base feature comparison was slightly more accurate overall. The distance map remained useful for explanation and organized study; that result did not establish extra predictive information.

Treat the map as a way to spend attention. If it helps you notice an unusual board change, ask what specific poker consequences follow. If it merely gives a familiar situation a memorable name, that can still help learning. A descriptive success and a predictive success are different achievements, and both can be measured.

> Grouping card identities changes the description, not the shuffle.

Try it first

Two hearts and two spades share a distance bucket. Can returning to their suits and remaining counts reveal the heart possibilities?

Worked answer. Yes. The physical cards retain the suit detail. Returning to those cards and their remaining counts lets you explore the heart question precisely.

FOUNDATIONS

Suits are a second geometry

Two identical rank maps can play differently.

Suited and offsuit versions of the same unequal-rank pocket have the same reference set and the same rank distances. Their paths to flushes differ. That makes them an excellent controlled comparison: the rank geometry stays fixed while the suit relationship changes.

The rank atlas reports both versions using independent Monte Carlo samples. Compare their estimated showdown shares, but also look at the sampling scale. A tiny observed difference may reflect finite sampling. Larger, repeated differences under the same assumptions offer more useful evidence about the suit relationship.

A suited pocket does not guarantee a flush draw on the flop. The public suits determine whether the hand has a direct draw, a backdoor possibility, or a fresh suit pattern to explore. On a three-heart board, a single high heart can matter in a way that is invisible to a rank-only map.

The equity model includes board-suit counts and hole-suit relationships alongside the distance features. This lets the forest distinguish situations that share a rank label but differ in hand-making opportunities. When a hint surprises you, inspect whether its explanation mentions suits, board pairing, or kickers rather than assuming the zone drove the choice.

Same ranks + different suits → same map, different possibilities

Try it first

Do A♥ Q♥ and A♣ Q♦ share a pocket rank map while opening different suit possibilities?

Worked answer. Yes. Their ranks match, so their pocket maps and labels match. Their suit relationships differ, which can change showdown share and betting considerations.

FOUNDATIONS

Name the hand you actually have

Made strength comes before imagined strength.

The evaluator ranks high card, one pair, two pair, three of a kind, straight, flush, full house, four of a kind, and straight flush. With seven available cards, the best legal five-card hand determines the showdown. The player is not required to use both hole cards.

On a board that already makes a strong five-card hand, your private cards may add nothing. A visually impressive pocket can still play the board. Conversely, a modest pocket may supply the critical kicker or the card that improves the board's category. Category and kicker information both matter.

The brain view estimates a pot share, which includes ties. If every remaining player has the same best five-card hand, nobody owns the whole pot by virtue of a prettier-looking pocket. A split is a fractional share, and the simulator preserves that fraction rather than labeling every tie as a full win.

Before evaluating a draw, say the made category out loud. Then identify the exact improvement you are hoping for. "I have high card with a flush draw" and "I have a made flush" are different states. The improvement hint counts category changes; the showdown estimator answers a broader comparison against possible opposing hands.

> Best five cards determine the hand; ties divide the eligible pot.

Try it first

With a royal flush on the board, can every active player use that royal flush and share the eligible pot?

Worked answer. Yes. Every active player can use the same royal flush on the board. The eligible pot is split, subject to the table's integer-chip remainder rule.

FOUNDATIONS

Count overlapping draws once

A card can do two jobs.

Consider A♥ Q♥ on J♥ T♥ 2♣. Nine unseen hearts complete a flush on the next card. Four kings complete a straight. K♥ belongs to both lists, so the union contains twelve physical cards. Adding nine and four without subtracting the overlap counts one card twice.

Those twelve are nominal draw completions, not twelve guaranteed winning cards. The opponent can hold one of them, have a hand that remains ahead in another example, or improve on a later street. A draw-completion count is a useful first calculation; a winning-out count requires a specified opposing range or hand.

The room's "Count my improvements" tool asks a different, deliberately broad question: which next cards improve the made-hand category? Pairing a hole card can satisfy that question. It may not satisfy a player who is counting only flush or straight completions. Read the label on the hint before comparing its number with your own.

Use sets when the possibilities overlap. Write the physical cards, merge the lists, and count unique members. The same discipline applies to straight windows, blockers, and cards that both pair the board and complete a suit draw. A clear set beats a quick but ambiguous total.

$$|A \cup B| = |A| + |B| - |A \cap B|$$

Try it first

For the draw example above, is the nominal next-card completion rate 12/47, about 25.53%, when the five displayed cards are known?

Worked answer. Yes. 12/47, about 25.53%. It is the chance of drawing a card in that union under a uniform unseen deck, not a guaranteed chance of winning the pot.

FOUNDATIONS

Two cards still to come

State what must remain true on the second draw.

A two-card calculation can be tempting because it turns a draw into one memorable percentage. Start by defining the event. “At least one card from a fixed set arrives by the river” is not always the same event as “my final hand wins.” The board can pair, draws can change, and another player can improve.

If there are U unseen cards and a fixed target set of O cards, the probability of missing that set on both of two draws without replacement is ((U−O)/U) × ((U−O−1)/(U−1)). Subtract from one to find the chance of hitting at least once. This is exact for the stated fixed-set event.

With nine fixed target cards among forty-seven unseen cards, the expression gives 1 − (38/47)(37/46), about 34.97%. This is useful for a simplified flush-completion question when the target set is defined correctly. It does not price additional bets or account for every way the eventual flush could lose.

The Monte Carlo lab samples full remaining boards and compares complete hands. That is a better tool when several improving and deteriorating paths overlap. The formula remains valuable because it gives you a transparent check on a simple event and clarifies what a more complex simulation is estimating.

$$P(\text{hit by two draws}) = 1 - ((U-O)/U)((U-O-1)/(U-1))$$

Try it first

Can including the price of a possible turn bet help you use a two-card draw percentage wisely?

Worked answer. Yes. The percentage assumes access to both future cards. A betting decision must account for the cost and possibility of continuing on the turn.

FOUNDATIONS

The price of a call

Use the pot you can actually win.

At a decision with betting held fixed, a call costing C into an eligible current pot P breaks even at a showdown share of C/(P+C). The current pot includes chips already committed by the other players. Your call adds C to the final amount being contested.

For a call of thirty into ninety, the threshold is twenty-five percent. At a true showdown share of thirty percent, the simplified expected result from the decision is 0.30×90 − 0.70×30, or plus six chips. That calculation treats chips you previously put in as already spent.

The word eligible matters. A short stack cannot win every side pot on the table. Using the total displayed pot in place of the portion you can contest can make a call look cheaper than it is. Multiway ties also belong in the share estimate: a three-way split contributes one third, not one half or one.

Earlier streets add future betting and strategic choices. A hand may not realize its raw showdown equity if pressure forces it to fold later. Conversely, later folds by opponents can add value. The call threshold is a clean reference point, and the learned continuation model attempts to account for more of the decision tree under its simulated opponents.

$$\text{Break-even call share} = C / (P + C)$$

Try it first

With a river call of 40 into an eligible pot of 160 and all betting ending after the call, does a 20% share break even in a rake-free game?

Worked answer. Yes. 40/(160+40)=20%, assuming betting complete and rake set to zero. If the pot is not fully eligible to you, first replace 160 with the relevant contestable amount.

FOUNDATIONS

The price of a bluff

The fold assumption does the work.

For a pure bluff that loses whenever called, expected return is F×P − (1−F)×B, where F is the probability everyone relevant folds, P is the pot you win immediately, and B is the amount you risk. The break-even fold rate is B/(P+B).

A half-pot bluff needs one third folds. A pot-sized bluff needs one half. A two-and-a-half-pot bluff needs 2.5/3.5, or about 71.43%. Increasing the size can change how opponents respond, but the response must improve enough to pay for the larger risk.

This is why an assumed fold percentage deserves scrutiny. Betting twenty-five into ten with a seventy-five-percent fold rate gives plus 1.25 chips in the simplified model. At sixty-five percent folds, the same bet gives minus 2.25. The cards and size did not change; the behavioral assumption did.

A semi-bluff retains some chance to win when called and therefore needs a more complete calculation. A multiway bluff must consider the whole field, not one opponent's fold statistic. Use the simple equation as a transparent baseline, then identify which additional branches matter in the actual spot.

$$\text{Pure-bluff threshold} = B / (P + B)$$

Try it first

When a pure bluff risks 60 to win 40, does a 60% fold rate reach the simplified break-even point?

Worked answer. Yes. 60/(40+60)=60%. That is the simplified break-even point. At exactly that rate the expected result is zero before any additional costs.

FOUNDATIONS

Give a value bet a customer

Being ahead is only the beginning.

A value bet seeks profitable calls from worse hands, or gains from denying opponents a cheap chance to improve. The important comparison is between available actions, not merely between your hand and the board. A strong hand can still prefer different sizes against different continuing ranges.

Imagine a river where worse pairs call a small bet but fold to a large one, while better hands continue against either size. The large bet risks concentrating the calling range against you. In another spot, a larger size can earn more because many worse hands continue. A single raw equity number does not identify which behavioral pattern is present.

The action forest learns from complete continuations after the legal sizes offered by the table. Its chip-return estimate includes the reactions of its simulated opponents. That is more specific than saying “strong hand, raise.” It is also why the estimate can fail when the opponent behaves differently from the training population.

Use the comparison as a prompt: which worse hands are paying, and which better hands are folding? If you cannot name either group, inspect the range assumption. A memorable zone label can organize the board, but the value-bet question lives in the interaction between hand strength, size and response.

> Compare returns across actions, not strength in isolation.

Try it first

Can comparing calls, folds, calling ranges, and bet sizes help you discover which action has the stronger expected value?

Worked answer. Yes. The frequency of calls and the strength of the calling range can change with size. Compare the whole distribution of outcomes, including folds and losses.

FOUNDATIONS

A crowded pot changes the question

One fold does not end a multiway hand.

At a full table, several players may have a claim on the pot. A bluff that would succeed against one opponent can fail because another continues. Showdown share can also fall when additional hands have a chance to beat yours. The number of seats at the table and the number of active opponents are different counts.

Do not multiply two observed fold percentages automatically. Such a product would assume the relevant fold events behave independently under the same conditions. Opponents share a board, react to the same bet, and can react to each other. Their decisions and ranges can be related.

The simulator handles these interactions by dealing disjoint pockets, taking actions in order, and resolving the resulting pots. It still uses an assumed population of policies. More players make the assumptions matter in more places, which is a reason to compare several plausible scenarios rather than to trust a narrower numerical display.

In the worked decisions, notice both the original table size and the active field. A nine-seat table can produce a heads-up river. Conversely, a six-seat flop with five opponents is genuinely crowded. Read the current view before choosing which atlas comparison is relevant.

Original seats ≠ active opponents

Try it first

At a nine-seat river with just you and Fern active, does the showdown comparison focus on one active opponent?

Worked answer. Yes. It compares you with one active opponent. Folded cards remain unknown card-removal variables; they are not eight live claims on the pot.

FOUNDATIONS

Position is an information advantage

The order of decisions changes what you know.

The dealer button determines the action order, with the heads-up blind convention handled separately by the engine. Acting later often means seeing more public decisions before making your own. That additional information can change the value of a check, call or bet even when the private cards are unchanged.

Position is not a universal permission to bet. A later player can still face a strong range, a poor price, or several opponents waiting behind in a different street configuration. Treat it as context: who has already acted, who can still act, and who can apply pressure after you commit chips?

The model's features include position relative to the button and whether the actor is the dealer. The table view also records which players remain active and have chips. Those details let the action model distinguish some situations that an equity-only policy would treat alike.

For a practice exercise, replay a saved hand and pause at each decision. Ask what the actor knew at that moment. Do not use a later reveal to explain an earlier choice as though the information had already been available. A good retrospective separates what was observable from what became known afterward.

> What happened before my turn? Who can act after it?

Try it first

Can a change of seat open different choices through action order, available information, and stack relationships?

Worked answer. Yes. The action order changes available information and exposure to later bets or raises. Stack relationships and active players can also differ, even though the card-based equity comparison looks similar.

FOUNDATIONS

Stacks shape the branches

A pot has a future, and stacks limit it.

A bet cannot risk more chips than a player has, and a player cannot win an unmatched amount from an opponent. Effective stack therefore matters alongside pot size. Two otherwise similar hands can present very different choices at twenty and one hundred big blinds.

The continuation target used by the action model divides chip return by a scale based on the pot and effective stack. This keeps many sizes in a manageable numerical range. It does not make every stack depth strategically equivalent. The public features preserve stack-to-pot and action-cost relationships so the model can distinguish them.

The earlier tournament alternated forty and one hundred big blinds at the start of each hand. Training also sampled several stack sizes. Persistent play can create larger imbalances and deeper stacks than those benchmark conditions. In those situations, the hint is an extrapolation from a finite training distribution.

Use the room's refill option for a continuing play-chip table. Empty opponent seats can receive fresh chips, and the notebook tracks the funding so a refill is not counted as profit. A table that keeps running is useful for practice, provided you remember that fresh funding changes the bankroll total.

> Stack-to-pot ratio describes room for future betting.

Try it first

When a seat receives 2,000 fresh play chips, should its recorded funding also rise by 2,000 to keep the hand results clear?

Worked answer. Yes. The chips came from a refill, not from winning hands. The saved funding total must rise by the same amount so net results remain interpretable.

FOUNDATIONS

Side pots and short raises

Follow eligibility, not just the largest number.

When players commit different all-in amounts, the engine divides the contributions into layers. Each layer is contested only by the players who contributed to it and remain eligible. A short stack may win the main pot while another player wins a side pot.

An unmatched contribution is returned rather than awarded as a contested win. This matters when reading the hand result and the HUD: an uncalled return is not evidence that the player beat another hand at showdown. The game distinguishes refunds from contested pots in its result structure.

A short all-in raise can increase the amount another player must call without reopening unrestricted raising for someone who already acted. The engine tracks the amount faced at a player's last action and the minimum full raise. This is a rules constraint, not a strategic preference of the model.

The adviser chooses from the legal actions supplied by the engine. If a raise is unavailable, it should not invent one. A useful debugging habit is to inspect the legal-action list before blaming a model for not selecting an imagined option. Rules correctness gives every later training result its meaning.

> Contribution layers determine pot eligibility.

Try it first

With contributions of 100, 250, and 250, do you get a 300-chip main pot and a 300-chip side pot?

Worked answer. Yes. The main pot is 300: 100 from each player. The remaining 150 from each deeper contributor forms a 300-chip side pot contested by those two eligible players.

FOUNDATIONS

Let the HUD remember

Statistics are compressed histories too.

The room's HUD records completed hands at each table size. VPIP is the fraction of hands with a voluntary preflop call or raise. PFR is the fraction with a preflop raise. Forced blinds do not count as voluntary entries. These definitions make the counters interpretable when a player is repeatedly short-stacked.

Aggression factor is bets plus raises divided by calls; checks are not in that denominator. Fold to bet uses decisions facing a bet as its opportunities. WTSD compares showdowns with hands that saw the flop. WSD counts showdowns winning any contested pot, including a split as a win. A dash means there is a denominator still waiting for its first opportunity.

These are the room's documented definitions, not a claim that every commercial HUD uses identical conventions. Read a statistic with its opportunity count and context. A high fold rate across small bets on early streets is not automatically the fold rate facing a river overbet.

The current models do not consume the displayed HUD totals. They are a memory aid for the player. The new range-conditioning experiment uses public actions within a hand, which is a different information source. Keeping that distinction explicit prevents a friendly interface from implying an adaptation the model has not learned.

> A percentage needs an event, an opportunity, and a sample size.

Try it first

With two folds in three opportunities, can you describe the recorded 67% and keep gathering hands to develop your read?

Worked answer. Yes. It describes three recorded opportunities. The sample is small, and its situations may differ from the decision you are considering now.

FOUNDATIONS

Small samples, gentle conclusions

Leave room for the next observation.

A HUD can turn a few memorable hands into a very confident-looking number. The display may be exact about the sample while the inference about the player remains uncertain. Four calls in five opportunities is exactly eighty percent of that sample; it is not proof of a stable eighty-percent calling tendency.

One way to think gently is to combine a modest prior expectation with new observations. For a hypothetical fold tendency, a Beta prior with parameters α and β gives a posterior mean (folds+α)/(opportunities+α+β). The prior contributes a stated amount of smoothing. It should be chosen for a reason and exposed as an assumption.

This formula is a teaching example, not a hidden feature in the current room. It also assumes a suitable repeated-event model. Pooling unlike decisions can still be misleading even with smoothing. A model that averages preflop blind defense with river decisions may answer neither question well.

Build confidence by making a prediction before the next relevant opportunity, then recording what happened. Keep the situation definition narrow enough to be useful. The purpose is not to label Fern forever, but to learn whether a particular response pattern helps explain this table.

$$\text{Smoothed fold mean} = (\text{folds} + \alpha) / (\text{opportunities} + \alpha + \beta)$$

Try it first

With a Beta(2,2) teaching prior and two folds in three opportunities, is the smoothed mean 4/7, about 57.14%?

Worked answer. Yes. (2+2)/(3+2+2)=4/7, about 57.14%. The raw sample rate is 66.67%. The difference shows the influence of the stated prior; neither number is a guaranteed future frequency.

FOUNDATIONS

Actions can inform a range

Condition on what was observed, not what was hidden.

An opponent's public call or raise can make some private hands more plausible than others under a behavioral model. Bayes' rule expresses the relationship: posterior weight is proportional to prior weight times the likelihood of the observed action. The difficult part is specifying that likelihood honestly.

The new training experiment proposes possible pockets and scores how compatible each is with the player's last observed call or raise under a fixed mixture of practice policies. It retains a small likelihood floor so an unexpected action does not eliminate every candidate. Twelve proposals per active opponent make this a finite approximation.

The sampler works sequentially to keep private cards disjoint. It ignores earlier action evidence once a later relevant action replaces it, and it uses an assumed population rather than a perfectly identified opponent. Those design choices save computation but prevent the result from being an exact joint posterior.

This is a concrete way to push the model beyond uniform unknown pockets while staying within public information. The experiment earns confidence only through evaluation. Better agreement with its own continuation labels is one check; improved returns against fresh opponents and decks are another. Neither check should be silently substituted for the other.

$$\text{Posterior weight} \propto \text{prior weight} \times \text{action likelihood}$$

Try it first

Can a practice peek help your human exploration while the adviser keeps using its own cards and public information?

Worked answer. Yes. The sampler uses the observer's own cards, public board, and public action evidence. A displayed peek adds a human learning opportunity while preserving that information boundary.

FOUNDATIONS

Monte Carlo is an experiment

Specify the world you are sampling.

A Monte Carlo estimate starts with a defined situation and a source of randomness. Here the observer knows a pocket and a public board. The simulator samples disjoint opposing pockets and any remaining board cards, evaluates every final hand, and records the observer's exact pot share.

The chosen range width changes the relative weights of possible opposing pockets. A width of one is uniform. Narrower settings favor stronger pockets according to the room's stated preflop-strength weighting function. This is a synthetic range assumption, not a database of what Fern actually holds.

Each sample draws without replacement within that simulated deal. Across samples, the deck is reset because each sample represents a different possible world consistent with the known cards. Confusing those two levels can make Monte Carlo sound as though it either reuses a card illegally or exhausts the deck after a few trials.

The book's examples use fixed namespaces and seeds so they can be reproduced. Reproducibility does not make one random sample uniquely correct. It makes it possible to inspect a calculation, compare a changed assumption, and find a software discrepancy without the result moving simply because the random stream changed.

Known cards + range assumption + samples → estimated showdown share

Try it first

Can a physical card appear again in a fresh Monte Carlo sample because each sample starts a separate possible deal?

Worked answer. Yes. Each sample is a separate possible deal. Cards cannot repeat within one deal, but the pool resets between independent simulated worlds.

FOUNDATIONS

Two kinds of spread

Outcomes vary; averages can become more precise.

Standard deviation describes the spread of individual sampled outcomes. Standard error describes the sampling uncertainty in their mean under the model used. A hand can remain volatile even when millions of samples estimate its average accurately.

For independent samples, the estimated standard error of the mean scales as the sample standard deviation divided by the square root of the sample count. Increasing the count fourfold therefore roughly halves the standard error. It does not halve the spread of the next single outcome.

The room displays an approximate interval around a sampled showdown mean. It is a sampling interval under the selected range model, not a guarantee about the next hand or a remedy for a wrong range. Near boundaries or with small samples, a simple normal approximation can be crude. The experiments show actual repeated estimates so that the approximation can be inspected.

A confidence procedure is interpreted through repeated use: under its assumptions, a stated proportion of intervals would cover the fixed quantity being estimated. It is not a promise that a particular displayed interval contains the truth. More samples sharpen one kind of uncertainty while leaving model assumptions open to challenge.

$$SE \approx SD / \sqrt{N}$$

Try it first

With outcome SD of 0.40 and 1,600 independent samples, is estimated standard error 0.01, or one percentage point?

Worked answer. Yes. 0.40/40=0.01, or one percentage point of showdown share. A rough 1.96-SE interval has a half-width near 1.96 percentage points, subject to the approximation's assumptions.

FOUNDATIONS

Compare on the same decks

Pairing spends randomness carefully.

Suppose two policies are evaluated on unrelated decks. A lucky sequence for one and an unlucky sequence for the other can obscure their difference. Pairing evaluates both on the same deck fixtures and corresponding seats, so much of the shared card difficulty can cancel in the comparison.

The tournaments rotate the candidate through every seat for a given deck and average those seat outcomes. The paired incumbent uses the same deck and opponent configuration. The difference between the two deck averages is the basic comparison unit. Confidence intervals are then formed across independent deck fixtures.

Seat rotations are related observations because they share the same deck. Treating every rotation as an independent deck would make uncertainty look smaller than it is. The published receipts state the number of complete hands and the number of independent deck fixtures separately.

Pairing does not guarantee identical random actions after two policies take different paths. Their future public states can diverge. It remains a useful controlled comparison because the starting cards, seats, stacks and opponent definitions are aligned. Read it as a reduction in one source of noise, not a removal of all uncertainty.

> Compare paired deck averages; keep the grouping in the interval.

Try it first

Do the six seats rotated around one deck belong to a shared fixture that should be grouped when estimating uncertainty?

Worked answer. Yes. The six hands share the same deck fixture and are deliberately related. Grouping them by deck respects that dependence when estimating uncertainty.

FOUNDATIONS

Give both labels room to learn

Training balance and natural frequency answer different needs.

A naturally sampled deck does not produce every rank label equally often. If training follows that frequency without adjustment, a less common label may receive fewer examples, especially after dividing by street and active field. Deliberate balancing gives the model more chances to learn those situations.

The equity training balances dynamic LIKELY and UNLIKELY groups across street and heads-up/multiway routing. The action collections target both labels on every street while playing actual hands at two, six and nine seats. Some later-street situations become heads-up because other players fold, so their resulting routing counts need not be equal.

Balanced training changes which examples the fitting procedure sees most often. Evaluation should therefore state its sampling design. A naturally occurring test distribution answers one deployment question; a balanced test answers another. Reporting per-label results helps show whether a good overall score hides a weak subgroup.

A zone label does not deserve a reward merely because it is the theme of the book. Labels come from sampled showdowns and continuations. Features and routing are tools for learning those labels. Their usefulness is assessed by comparison, including a simpler feature set when practical.

> Balance the learning opportunity; describe the evaluation distribution.

Try it first

Can reporting LIKELY and UNLIKELY errors separately help you discover how each zone contributes to the overall result?

Worked answer. Yes. The separate scores show the experience of each group. A common group can dominate the overall average, so studying both zones helps you see where the next improvement can shine.

FOUNDATIONS

How a forest answers

Many explicit paths, one combined estimate.

A regression tree asks a sequence of threshold questions about a feature vector and ends at a numerical leaf. A forest combines predictions from multiple trees. The exported WSRF models in this room store those branches and leaves directly, so the browser can reproduce the fitted prediction and display an example path.

WSRF organizes the trees into named pools. The selected equity model uses street and active-field context to choose its pool, then evaluates features describing the pocket, board, suits, range assumption and distance geometry. The action model adds public betting context and a candidate legal action.

A displayed path is one tree's explanation, not a proof that a feature caused the final outcome. Other trees may ask different questions. Tree disagreement is a useful descriptive signal about the ensemble, but it is not the same thing as a calibrated confidence interval around a true poker value.

The implementation checks Python-to-browser parity, including values close to split thresholds. That matters because the browser and Python must make the same branch decisions. A beautiful explanation is not enough if the served model silently differs from the model that was evaluated.

Feature vector → routing pool → tree paths → combined prediction

Try it first

Can other trees reveal distance-feature paths beyond the first displayed tree, with fresh comparisons testing their predictive contribution?

Worked answer. Yes. Other trees may use it. The displayed path is a local explanation from one tree, and even feature usage alone does not establish predictive benefit.

FOUNDATIONS

Equity and action value

A showdown estimate is not a betting policy.

Equity estimates the expected share of a showdown under specified cards and opposing ranges. It says nothing by itself about how much must be paid, whether an opponent will fold, or what later betting will occur. A betting policy chooses among actions in that larger decision process.

The action trainer starts at a legal decision and simulates each available action through to the end of the hand. It records final stack minus current stack, normalized by a pot/effective-stack scale. Earlier contributions are sunk at that decision. Folding is therefore assigned zero additional chips when actions are ranked.

The remaining continuations are played by fixed practice policies. Their reactions determine part of the target being learned. An action can look attractive because those opponents fold too often, call too loosely, or choose particular sizes. A model that learns those targets accurately is not automatically optimal against every opponent.

The room offers patient and bolder nudges as small adjustments to the action ranking. These nudges do not alter the cards or the equity estimate. When comparing a hint with a tournament result, remember which policy was measured: the benchmark uses a defined balanced setting, while a player can choose a different nudge.

$$\text{Action target} = (\text{final stack} - \text{current stack}) / \text{scale}$$

Try it first

Can folds and favorable later branches make an aggressive action attractive even with lower raw showdown equity?

Worked answer. Yes. The action may win through folds or create favorable later branches. That preference depends on the response model and bet size, so it must be evaluated rather than inferred from the zone label.

FOUNDATIONS

Separate learning from judging

A fresh test earns its name only once.

Training data fits the model. Validation data helps choose parameters, feature designs or candidate policies. A final test estimates performance after those choices are frozen. If the final test is repeatedly used to select the next design, it has become another validation set, whatever the filename says.

The new experiment uses a new seed namespace for its training and position tests. Its played-match validation compares candidates on several opponent/table settings. The promotion rule is recorded before the final tournament: the chosen candidate must improve the mean paired result and improve the tight-opponent comparison on validation, or the incumbent remains the serving policy.

Final results can still disappoint. That is information to publish and use in a later experiment with another fresh evaluation. It should not trigger a silent relabeling of which data was supposedly held out. Keeping the receipts makes the sequence of decisions reviewable.

The atlas examples form another independent collection. They are explanations and experiments, not secretly added training rows. A reader can study them without confusing the page count with the training sample count. More pages and more learning data are both useful only when their roles remain clear.

Train → validate → freeze the choice → evaluate fresh fixtures

Try it first

After a test helps select a model, can a fresh independent evaluation give you a clearer view of its generalization?

Worked answer. Yes. The earlier test helped shape the choice. A new, independent evaluation gives the next estimate of how that choice transfers to fresh hands.

FOUNDATIONS

Confidence that can grow

Keep the wonder and keep the receipt.

Confidence grows when a useful explanation survives a new example, a changed assumption, and an independent test. It does not need to become certainty about the next card. The pleasure of the distance approach is that a complicated hand can acquire a readable shape while the underlying uncertainty remains visible.

The earlier WSRF model improved on its predecessor at all three tested table sizes, yet struggled against a tight practice policy. That combination is a good research starting point. It identifies both a demonstrated capability and a specific failure mode. The new training targets that weakness and publishes the outcome rather than assuming that more fitting must help.

At the table, distinguish a sound decision from a lucky result. In study, distinguish a memorable feature from a proven predictive contribution. In development, distinguish a passed software check from strong strategic performance. These distinctions let a project become more ambitious without becoming less clear.

Use this book as a laboratory you can return to. Pick a map, follow a journey, pause at a worked decision, and answer a drill before reading the solution. The pattern becomes yours through repeated, understandable encounters. That is a durable kind of confidence: curious, revisable, and ready for another hand.

Confidence = clear assumptions + reproducible work + fresh evidence

Try it first

If an experiment points toward further improvement, can you keep the strongest validated model in play and use the findings to inspire the next experiment?

Worked answer. Yes. Keep the strongest validated model for play, publish the comparison, and design a fresh experiment around what you learned. Every carefully recorded result gives your next idea a firmer starting point.

DECISION LABORATORY

Heads-up · preflop · LIKELY

A shorter stack

ACTOR'S POCKET

9 ♠ 4 ♠

PREFLOP BOARD

Flop ahead

Original table	Active opponents	Stack	Pot	Call
2	1	590	30	10

This is a preflop decision. The suited pocket shares a suit, which creates possibilities absent from the offsuit version with the same map.

The pocket is **LIKELY** at 10/13 near ranks; the dynamic map is **LIKELY** at 10/13. Their matching labels do not imply that the two reference sets or every distance value are identical.

Change the assumption

Width	MC share	95% interval	WSRF
100%	43.6%	42.6%–44.6%	45.1%
60%	38.3%	37.3%–39.3%	37.5%
25%	35.0%	34.0%–36.0%	36.4%

Available choices

Action	Est. chips
Raise to 60	+11.9
Call 10	+10.3
Raise to 40	+5.1
Fold	0.0
All in · 600	-58.1

The archived v3 forest suggests **raise to 60**. Existing contributions are spent; folding is scored at zero. These values describe its simulated continuations. Compare the full action list with the call price and your range assumption.

A discovery to try

Can the WSRF hint help you explore this decision alongside the price and active field? **Yes.** Its action ranking gives you a concrete starting point. On this street, compare price, active opponents, and future betting. Connecting these pieces makes the suggestion easier to understand.

Study fixture 2/preflop/true/0 · 8,192 samples per range · exact seed and model hashes in zone-atlas.json.

DECISION LABORATORY

Heads-up · preflop · LIKELY

Room to maneuver

ACTOR'S POCKET

8 ♠ Q ♥

PREFLOP BOARD

Flop ahead

Original table	Active opponents	Stack	Pot	Call
2	1	1,190	30	10

This is a preflop decision. The pocket is offsuit. Its rank relationships do not create a flush advantage by themselves.

The pocket is **LIKELY** at 9/13 near ranks; the dynamic map is **LIKELY** at 9/13. Their matching labels do not imply that the two reference sets or every distance value are identical.

Change the assumption

Width	MC share	95% interval	WSRF
100%	52.4%	51.4%–53.5%	54.2%
60%	46.9%	45.8%–47.9%	45.8%
25%	43.9%	42.8%–44.9%	42.6%

Available choices

Action	Est. chips
Raise to 40	+8.5
Raise to 60	+8.1
Fold	0.0
Call 10	-3.0
All in · 1200	-76.3

The archived v3 forest suggests **raise to 40**. Existing contributions are spent; folding is scored at zero. These values describe its simulated continuations. Compare the full action list with the call price and your range assumption.

A discovery to try

Can the WSRF hint help you explore this decision alongside the price and active field? **Yes.** Its action ranking gives you a concrete starting point. On this street, compare price, active opponents, and future betting. Connecting these pieces makes the suggestion easier to understand.

Study fixture 2/preflop/true/1 · 8,192 samples per range · exact seed and model hashes in zone-atlas.json.

DECISION LABORATORY

Heads-up · preflop · LIKELY

A deeper decision

ACTOR'S POCKET

4 ♥ 7 ♣

PREFLOP BOARD

Flop ahead

Original table	Active opponents	Stack	Pot	Call
2	1	1,990	30	10

This is a preflop decision. The pocket is offsuit. Its rank relationships do not create a flush advantage by themselves.

The pocket is **LIKELY** at 8/13 near ranks; the dynamic map is **LIKELY** at 8/13. Their matching labels do not imply that the two reference sets or every distance value are identical.

Change the assumption

Width	MC share	95% interval	WSRF
100%	38.5%	37.5%–39.6%	37.8%
60%	32.7%	31.7%–33.7%	32.8%
25%	32.7%	31.7%–33.7%	33.2%

Available choices

Action	Est. chips
Fold	0.0
Call 10	-40.8
Raise to 60	-62.5
Raise to 40	-70.0
All in · 2000	-434.5

The archived v3 forest suggests **fold**. Existing contributions are spent; folding is scored at zero. These values describe its simulated continuations. Compare the full action list with the call price and your range assumption.

A discovery to try

Can the WSRF hint help you explore this decision alongside the price and active field? **Yes.** Its action ranking gives you a concrete starting point. On this street, compare price, active opponents, and future betting. Connecting these pieces makes the suggestion easier to understand.

Study fixture 2/preflop/true/2 · 8,192 samples per range · exact seed and model hashes in zone-atlas.json.

DECISION LABORATORY

Heads-up · preflop · UNLIKELY

A shorter stack

ACTOR'S POCKET

3 ♣ A ♣

PREFLOP BOARD

Flop ahead

Original table	Active opponents	Stack	Pot	Call
2	1	580	40	0

This is a preflop decision. The suited pocket shares a suit, which creates possibilities absent from the offsuit version with the same map.

The pocket is **UNLIKELY** at 6/13 near ranks; the dynamic map is **UNLIKELY** at 6/13. Their matching labels do not imply that the two reference sets or every distance value are identical.

Change the assumption

Width	MC share	95% interval	WSRF
100%	57.5%	56.4%–58.5%	57.9%
60%	53.2%	52.1%–54.3%	53.4%
25%	50.7%	49.6%–51.8%	50.6%

Available choices

Action	Est. chips
All in · 600	+46.2
Check	+30.2
Raise to 60	+23.4
Raise to 40	+16.8

The archived v3 forest suggests **all in · 600**. Existing contributions are spent; folding is scored at zero. These values describe its simulated continuations. Compare the full action list with the call price and your range assumption.

A discovery to try

Can the WSRF hint help you explore this decision alongside the price and active field? **Yes.** Its action ranking gives you a concrete starting point. On this street, compare price, active opponents, and future betting. Connecting these pieces makes the suggestion easier to understand.

Study fixture 2/preflop/false/0 · 8,192 samples per range · exact seed and model hashes in zone-atlas.json.

DECISION LABORATORY

Heads-up · preflop · UNLIKELY

Room to maneuver

ACTOR'S POCKET

2 ♣ J ♥

PREFLOP BOARD

Flop ahead

Original table	Active opponents	Stack	Pot	Call
2	1	1,190	30	10

This is a preflop decision. The pocket is offsuit. Its rank relationships do not create a flush advantage by themselves.

The pocket is **UNLIKELY** at 6/13 near ranks; the dynamic map is **UNLIKELY** at 6/13. Their matching labels do not imply that the two reference sets or every distance value are identical.

Change the assumption

Width	MC share	95% interval	WSRF
100%	43.8%	42.7%–44.8%	44.6%
60%	37.3%	36.3%–38.4%	36.9%
25%	35.8%	34.7%–36.8%	35.0%

Available choices

Action	Est. chips
Fold	0.0
Raise to 40	-18.4
Raise to 60	-20.1
Call 10	-27.4
All in · 1200	-53.9

The archived v3 forest suggests **fold**. Existing contributions are spent; folding is scored at zero. These values describe its simulated continuations. Compare the full action list with the call price and your range assumption.

A discovery to try

Can the WSRF hint help you explore this decision alongside the price and active field? **Yes.** Its action ranking gives you a concrete starting point. On this street, compare price, active opponents, and future betting. Connecting these pieces makes the suggestion easier to understand.

Study fixture 2/preflop/false/1 · 8,192 samples per range · exact seed and model hashes in zone-atlas.json.

DECISION LABORATORY

Heads-up · preflop · UNLIKELY

A deeper decision

ACTOR'S POCKET

2 ♥ 9 ♥

PREFLOP BOARD

Flop ahead

Original table	Active opponents	Stack	Pot	Call
2	1	1,990	30	10

This is a preflop decision. The suited pocket shares a suit, which creates possibilities absent from the offsuit version with the same map.

The pocket is **UNLIKELY** at 6/13 near ranks; the dynamic map is **UNLIKELY** at 6/13. Their matching labels do not imply that the two reference sets or every distance value are identical.

Change the assumption

Width	MC share	95% interval	WSRF
100%	42.8%	41.7%–43.8%	43.1%
60%	37.0%	36.0%–38.0%	36.6%
25%	35.1%	34.1%–36.2%	35.4%

Available choices

Action	Est. chips
Fold	0.0
Raise to 40	-10.8
Raise to 60	-20.4
Call 10	-29.9
All in · 2000	-303.0

The archived v3 forest suggests **fold**. Existing contributions are spent; folding is scored at zero. These values describe its simulated continuations. Compare the full action list with the call price and your range assumption.

A discovery to try

Can the WSRF hint help you explore this decision alongside the price and active field? **Yes.** Its action ranking gives you a concrete starting point. On this street, compare price, active opponents, and future betting. Connecting these pieces makes the suggestion easier to understand.

Study fixture 2/preflop/false/2 · 8,192 samples per range · exact seed and model hashes in zone-atlas.json.

DECISION LABORATORY

Heads-up · flop · LIKELY

A shorter stack

ACTOR'S POCKET

4 ♥ J ♣

FLOP BOARD

5 ♣ 9 ♥ 6 ♣

Original table	Active opponents	Stack	Pot	Call
2	1	580	40	0

The made category is **high card** on a wet board. The hand needs improvement or a favorable betting path; the rank label alone does not supply showdown strength.

The pocket is **LIKELY** at 10/13 near ranks; the dynamic map is **LIKELY** at 10/13. Their matching labels do not imply that the two reference sets or every distance value are identical.

Change the assumption

Width	MC share	95% interval	WSRF
100%	30.2%	29.2%–31.1%	30.3%
60%	25.1%	24.2%–26.0%	22.8%
25%	24.0%	23.1%–24.9%	22.9%

Available choices

Action	Est. chips
Check	-12.4
Bet 40	-27.3
Bet 20	-32.4
All in · 580	-116.4

The archived v3 forest suggests **check**. Existing contributions are spent; folding is scored at zero. These values describe its simulated continuations. Compare the full action list with the call price and your range assumption.

> **A discovery to try**
>
> Can you count 4 of 47 unseen next cards that change the dynamic label? **Yes.** Enumerating the remaining physical cards gives that exact count. Example ranks: 2. Your map makes the pattern visible.

Study fixture 2/flop/true/0 · 8,192 samples per range · exact seed and model hashes in zone-atlas.json.

DECISION LABORATORY

Heads-up · flop · LIKELY

Room to maneuver

ACTOR'S POCKET

3 ♥ J ♠

FLOP BOARD

5 ♠ 5 ♣ K ♦

Original table	Active opponents	Stack	Pot	Call
2	1	1,180	40	0

The made category is **one pair** on a paired board. Check the kicker relationships and which higher categories the board can support.

The pocket is **LIKELY** at 8/13 near ranks; the dynamic map is **LIKELY** at 11/13. Their matching labels do not imply that the two reference sets or every distance value are identical.

Change the assumption

Width	MC share	95% interval	WSRF
100%	37.8%	36.8%–38.8%	38.4%
60%	28.7%	27.8%–29.6%	26.3%
25%	24.9%	24.0%–25.7%	26.3%

Available choices

Action	Est. chips
Check	-36.3
Bet 20	-61.4
Bet 40	-88.2
All in · 1180	-379.3

The archived v3 forest suggests **check**. Existing contributions are spent; folding is scored at zero. These values describe its simulated continuations. Compare the full action list with the call price and your range assumption.

A discovery to try

Can you count 4 of 47 unseen next cards that change the dynamic label? **Yes.** Enumerating the remaining physical cards gives that exact count. Example ranks: 2. Your map makes the pattern visible.

Study fixture 2/flop/true/1 · 8,192 samples per range · exact seed and model hashes in zone-atlas.json.

DECISION LABORATORY

Heads-up · flop · LIKELY

A deeper decision

ACTOR'S POCKET

7 ♦ 9 ♠

FLOP BOARD

Q ♣ 9 ♦ J ♦

Original table	Active opponents	Stack	Pot	Call
2	1	1,980	40	0

The made category is **one pair** on a wet board. Check the kicker relationships and which higher categories the board can support.

The pocket is **LIKELY** at 11/13 near ranks; the dynamic map is **LIKELY** at 9/13. Their matching labels do not imply that the two reference sets or every distance value are identical.

Change the assumption

Width	MC share	95% interval	WSRF
100%	60.2%	59.1%–61.2%	59.6%
60%	49.3%	48.2%–50.3%	50.9%
25%	45.3%	44.2%–46.3%	50.1%

Available choices

Action	Est. chips
Check	-16.3
Bet 20	-18.1
Bet 40	-23.7
All in · 1980	-45.7

The archived v3 forest suggests **check**. Existing contributions are spent; folding is scored at zero. These values describe its simulated continuations. Compare the full action list with the call price and your range assumption.

A discovery to try

Can you count 4 of 47 unseen next cards that change the dynamic label? **Yes.** Enumerating the remaining physical cards gives that exact count. Example ranks: 2. Your map makes the pattern visible.

Study fixture 2/flop/true/2 · 8,192 samples per range · exact seed and model hashes in zone-atlas.json.

DECISION LABORATORY

Heads-up · flop · UNLIKELY

A shorter stack

ACTOR'S POCKET

2 ♥ 7 ♠

FLOP BOARD

J ♥ 2 ♦ J ♣

Original table	Active opponents	Stack	Pot	Call
2	1	580	40	0

The made category is **two pair** on a paired board. Check the kicker relationships and which higher categories the board can support.

The pocket is **UNLIKELY** at 6/13 near ranks; the dynamic map is **UNLIKELY** at 6/13. Their matching labels do not imply that the two reference sets or every distance value are identical.

Change the assumption

Width	MC share	95% interval	WSRF
100%	60.0%	59.0%–61.1%	60.5%
60%	54.2%	53.1%–55.3%	55.9%
25%	51.4%	50.3%–52.5%	54.8%

Available choices

Action	Est. chips
Bet 40	-17.1
Bet 20	-17.8
Check	-18.6
All in · 580	-23.9

The archived v3 forest suggests **bet 40**. Existing contributions are spent; folding is scored at zero. These values describe its simulated continuations. Compare the full action list with the call price and your range assumption.

A discovery to try

Can you count 45 of 47 unseen next cards that change the dynamic label? **Yes.** Enumerating the remaining physical cards gives that exact count. Example ranks: 3, 4, 5, 6, 7, 8, 9, T, Q, K, A, J. Your map makes the pattern visible.

Study fixture 2/flop/false/0 · 8,192 samples per range · exact seed and model hashes in zone-atlas.json.

DECISION LABORATORY

Heads-up · flop · UNLIKELY

Room to maneuver

ACTOR'S POCKET

6 ♥ K ♦

FLOP BOARD

6 ♠ 5 ♥ 3 ♥

Original table	Active opponents	Stack	Pot	Call
2	1	1,180	40	0

The made category is **one pair** on a wet board. Check the kicker relationships and which higher categories the board can support.

The pocket is **LIKELY** at 11/13 near ranks; the dynamic map is **UNLIKELY** at 6/13. Their disagreement is a comparison between reference frames, not conflicting forecasts.

Change the assumption

Width	MC share	95% interval	WSRF
100%	65.4%	64.4%–66.4%	66.7%
60%	65.6%	64.6%–66.6%	63.4%
25%	62.9%	61.9%–64.0%	60.5%

Available choices

Action	Est. chips
All in · 1180	+78.9
Bet 40	+46.2
Check	+44.0
Bet 20	+43.7

The archived v3 forest suggests **all in · 1180**. Existing contributions are spent; folding is scored at zero. These values describe its simulated continuations. Compare the full action list with the call price and your range assumption.

A discovery to try

Can you count 29 of 47 unseen next cards that change the dynamic label? **Yes.** Enumerating the remaining physical cards gives that exact count. Example ranks: 6, 7, 8, 9, T, J, Q, K. Your map makes the pattern visible.

Study fixture 2/flop/false/1 · 8,192 samples per range · exact seed and model hashes in zone-atlas.json.

DECISION LABORATORY

Heads-up · flop · UNLIKELY

A deeper decision

ACTOR'S POCKET

Q ♣ 3 ♥

FLOP BOARD

2 ♥ 2 ♠ 8 ♣

Original table	Active opponents	Stack	Pot	Call
2	1	1,940	120	0

The made category is **one pair** on a paired board. Check the kicker relationships and which higher categories the board can support.

The pocket is **LIKELY** at 8/13 near ranks; the dynamic map is **UNLIKELY** at 6/13. Their disagreement is a comparison between reference frames, not conflicting forecasts.

Change the assumption

Width	MC share	95% interval	WSRF
100%	41.0%	40.0%–42.0%	39.9%
60%	33.5%	32.5%–34.5%	31.8%
25%	29.6%	28.7%–30.6%	31.0%

Available choices

Action	Est. chips
Check	-77.8
Bet 20	-82.7
Bet 60	-115.9
Bet 120	-133.0
All in · 1940	-545.6

The archived v3 forest suggests **check**. Existing contributions are spent; folding is scored at zero. These values describe its simulated continuations. Compare the full action list with the call price and your range assumption.

A discovery to try

Can you count 45 of 47 unseen next cards that change the dynamic label? **Yes.** Enumerating the remaining physical cards gives that exact count. Example ranks: 3, 4, 5, 6, 7, 9, T, J, K, A, 8, Q. Your map makes the pattern visible.

Study fixture 2/flop/false/2 · 8,192 samples per range · exact seed and model hashes in zone-atlas.json.

DECISION LABORATORY

Heads-up · turn · LIKELY

A shorter stack

ACTOR'S POCKET

9 ♦ 6 ♥

TURN BOARD

3 ♥ 6 ♦ A ♥ 7 ♦

Original table	Active opponents	Stack	Pot	Call
2	1	580	40	0

The made category is **one pair** on a wet board. Check the kicker relationships and which higher categories the board can support.

The pocket is **LIKELY** at 10/13 near ranks; the dynamic map is **LIKELY** at 9/13. Their matching labels do not imply that the two reference sets or every distance value are identical.

Change the assumption

Width	MC share	95% interval	WSRF
100%	59.6%	58.6%–60.7%	60.9%
60%	53.7%	52.6%–54.8%	53.0%
25%	49.0%	47.9%–50.0%	52.7%

Available choices

Action	Est. chips
All in · 580	-32.8
Check	-40.1
Bet 20	-41.1
Bet 40	-41.2

The archived v3 forest suggests **all in · 580**. Existing contributions are spent; folding is scored at zero. These values describe its simulated continuations. Compare the full action list with the call price and your range assumption.

A discovery to try

Can you count 4 of 46 unseen next cards that change the dynamic label? **Yes.** Enumerating the remaining physical cards gives that exact count. Example ranks: 2. Your map makes the pattern visible.

Study fixture 2/turn/true/0 · 8,192 samples per range · exact seed and model hashes in zone-atlas.json.

DECISION LABORATORY

Heads-up · turn · LIKELY

Room to maneuver

ACTOR'S POCKET

Q ♠ 6 ♠

TURN BOARD

5 ♠ Q ♥ 8 ♥ 7 ♥

Original table	Active opponents	Stack	Pot	Call
2	1	1,140	120	0

The made category is **one pair** on a wet board. Check the kicker relationships and which higher categories the board can support.

The pocket is **LIKELY** at 11/13 near ranks; the dynamic map is **LIKELY** at 10/13. Their matching labels do not imply that the two reference sets or every distance value are identical.

Change the assumption

Width	MC share	95% interval	WSRF
100%	71.6%	70.7%–72.6%	71.1%
60%	68.8%	67.8%–69.7%	65.7%
25%	66.6%	65.6%–67.6%	65.7%

Available choices

Action	Est. chips
All in · 1140	-3.7
Bet 60	-13.6
Bet 20	-21.9
Check	-22.0
Bet 120	-35.6

The archived v3 forest suggests **all in · 1140**. Existing contributions are spent; folding is scored at zero. These values describe its simulated continuations. Compare the full action list with the call price and your range assumption.

A discovery to try

Can you count 4 of 46 unseen next cards that change the dynamic label? **Yes.** Enumerating the remaining physical cards gives that exact count. Example ranks: 2. Your map makes the pattern visible.

Study fixture 2/turn/true/1 · 8,192 samples per range · exact seed and model hashes in zone-atlas.json.

DECISION LABORATORY

Heads-up · turn · LIKELY

A deeper decision

ACTOR'S POCKET

6 ♥ 9 ♠

TURN BOARD

6 ♦ J ♦ 9 ♣ 6 ♠

Original table	Active opponents	Stack	Pot	Call
2	1	1,940	120	0

The made category is **full house** on a paired board. A strong category still needs comparison with possible better hands and shared-board ties.

The pocket is **LIKELY** at 10/13 near ranks; the dynamic map is **LIKELY** at 10/13. Their matching labels do not imply that the two reference sets or every distance value are identical.

Change the assumption

Width	MC share	95% interval	WSRF
100%	98.2%	98.0%–98.5%	97.0%
60%	97.1%	96.8%–97.5%	97.0%
25%	96.4%	96.0%–96.8%	97.0%

Available choices

Action	Est. chips
All in · 1940	+974.0
Bet 120	+858.4
Bet 60	+845.8
Check	+844.2
Bet 20	+844.2

The archived v3 forest suggests **all in · 1940**. Existing contributions are spent; folding is scored at zero. These values describe its simulated continuations. Compare the full action list with the call price and your range assumption.

> **A discovery to try**
>
> Can you count 4 of 46 unseen next cards that change the dynamic label? **Yes.** Enumerating the remaining physical cards gives that exact count. Example ranks: 2. Your map makes the pattern visible.

Study fixture 2/turn/true/2 · 8,192 samples per range · exact seed and model hashes in zone-atlas.json.

DECISION LABORATORY

Heads-up · turn · UNLIKELY

A shorter stack

ACTOR'S POCKET

9 ♣ 6 ♦

TURN BOARD

5 ♦ 3 ♠ K ♦ 2 ♠

Original table	Active opponents	Stack	Pot	Call
2	1	580	40	0

The made category is **high card** on a wet board. The hand needs improvement or a favorable betting path; the rank label alone does not supply showdown strength.

The pocket is **LIKELY** at 10/13 near ranks; the dynamic map is **UNLIKELY** at 5/13. Their disagreement is a comparison between reference frames, not conflicting forecasts.

Change the assumption

Width	MC share	95% interval	WSRF
100%	21.8%	20.9%–22.6%	22.0%
60%	19.4%	18.5%–20.2%	20.1%
25%	17.6%	16.8%–18.5%	20.0%

Available choices

Action	Est. chips
Bet 20	-8.1
Check	-12.0
Bet 40	-15.6
All in · 580	-200.7

The archived v3 forest suggests **bet 20**. Existing contributions are spent; folding is scored at zero. These values describe its simulated continuations. Compare the full action list with the call price and your range assumption.

A discovery to try

Can you count 0 of 46 unseen next cards that change the dynamic label? **Yes.** Enumerating the remaining physical cards gives that exact count. Every possible next card preserves this label. Your map makes the pattern visible.

Study fixture 2/turn/false/0 · 8,192 samples per range · exact seed and model hashes in zone-atlas.json.

DECISION LABORATORY

Heads-up · turn · UNLIKELY

Room to maneuver

ACTOR'S POCKET

T ♠ 4 ♠

TURN BOARD

9 ♥ 3 ♥ 2 ♥ 2 ♠

Original table	Active opponents	Stack	Pot	Call
2	1	1,140	120	0

The made category is **one pair** on a paired board. Check the kicker relationships and which higher categories the board can support.

The pocket is **LIKELY** at 10/13 near ranks; the dynamic map is **UNLIKELY** at 3/13. Their disagreement is a comparison between reference frames, not conflicting forecasts.

Change the assumption

Width	MC share	95% interval	WSRF
100%	18.0%	17.2%–18.8%	28.3%
60%	13.7%	13.0%–14.4%	16.9%
25%	12.0%	11.3%–12.7%	16.8%

Available choices

Action	Est. chips
Check	-6.0
Bet 20	-10.4
Bet 60	-59.1
Bet 120	-110.5
All in · 1140	-365.9

The archived v3 forest suggests **check**. Existing contributions are spent; folding is scored at zero. These values describe its simulated continuations. Compare the full action list with the call price and your range assumption.

A discovery to try

Can you count 0 of 46 unseen next cards that change the dynamic label? **Yes.** Enumerating the remaining physical cards gives that exact count. Every possible next card preserves this label. Your map makes the pattern visible.

Study fixture 2/turn/false/1 · 8,192 samples per range · exact seed and model hashes in zone-atlas.json.

DECISION LABORATORY

Heads-up · turn · UNLIKELY

A deeper decision

ACTOR'S POCKET

A ♥ 6 ♣

TURN BOARD

9 ♣ T ♠ 3 ♥ 2 ♦

Original table	Active opponents	Stack	Pot	Call
2	1	1,980	40	0

The made category is **high card** on a dry board. The hand needs improvement or a favorable betting path; the rank label alone does not supply showdown strength.

The pocket is **LIKELY** at 10/13 near ranks; the dynamic map is **UNLIKELY** at 4/13. Their disagreement is a comparison between reference frames, not conflicting forecasts.

Change the assumption

Width	MC share	95% interval	WSRF
100%	40.5%	39.4%–41.5%	39.0%
60%	38.8%	37.7%–39.8%	38.0%
25%	35.3%	34.2%–36.3%	35.7%

Available choices

Action	Est. chips
Check	-25.8
Bet 20	-53.7
Bet 40	-81.4
All in · 1980	-591.0

The archived v3 forest suggests **check**. Existing contributions are spent; folding is scored at zero. These values describe its simulated continuations. Compare the full action list with the call price and your range assumption.

A discovery to try

Can you count 0 of 46 unseen next cards that change the dynamic label? **Yes.** Enumerating the remaining physical cards gives that exact count. Every possible next card preserves this label. Your map makes the pattern visible.

Study fixture 2/turn/false/2 · 8,192 samples per range · exact seed and model hashes in zone-atlas.json.

DECISION LABORATORY

Heads-up · river · LIKELY

A shorter stack

ACTOR'S POCKET

A ♣ 7 ♣

RIVER BOARD

5 ♦ 2 ♠ 4 ♥ J ♦ 3 ♦

Original table	Active opponents	Stack	Pot	Call
2	1	580	40	0

The made category is **straight** on a wet board. A strong category still needs comparison with possible better hands and shared-board ties.

The pocket is **LIKELY** at 9/13 near ranks; the dynamic map is **LIKELY** at 8/13. Their matching labels do not imply that the two reference sets or every distance value are identical.

Change the assumption

Width	MC share	95% interval	WSRF
100%	73.5%	72.6%–74.4%	83.1%
60%	74.1%	73.3%–74.9%	83.1%
25%	74.7%	73.8%–75.5%	83.1%

Available choices

Action	Est. chips
All in · 580	+219.1
Bet 40	+57.8
Bet 20	+54.3
Check	+51.2

The archived v3 forest suggests **all in · 580**. Existing contributions are spent; folding is scored at zero. These values describe its simulated continuations. Compare the full action list with the call price and your range assumption.

> **A discovery to try**
>
> Can the WSRF hint help you explore this decision alongside the price and active field? **Yes.** Its action ranking gives you a concrete starting point. On the river, compare eligible pot share and opposing ranges. Connecting these pieces makes the suggestion easier to understand.

Study fixture 2/river/true/0 · 8,192 samples per range · exact seed and model hashes in zone-atlas.json.

DECISION LABORATORY

Heads-up · river · LIKELY

Room to maneuver

ACTOR'S POCKET

T ♥ Q ♥

RIVER BOARD

8 ♥ 6 ♥ Q ♣ A ♥ 9 ♠

Original table	Active opponents	Stack	Pot	Call
2	1	240	1,920	0

The made category is **flush** on a wet board. A strong category still needs comparison with possible better hands and shared-board ties.

The pocket is **LIKELY** at 11/13 near ranks; the dynamic map is **LIKELY** at 8/13. Their matching labels do not imply that the two reference sets or every distance value are identical.

Change the assumption

Width	MC share	95% interval	WSRF
100%	99.2%	99.0%–99.4%	97.6%
60%	99.0%	98.8%–99.2%	97.6%
25%	98.9%	98.6%–99.1%	97.6%

Available choices

Action	Est. chips
All in · 240	+1999.6
Check	+1971.9
Bet 20	+1971.4

The archived v3 forest suggests **all in · 240**. Existing contributions are spent; folding is scored at zero. These values describe its simulated continuations. Compare the full action list with the call price and your range assumption.

A discovery to try

Can the WSRF hint help you explore this decision alongside the price and active field? **Yes.** Its action ranking gives you a concrete starting point. On the river, compare eligible pot share and opposing ranges. Connecting these pieces makes the suggestion easier to understand.

Study fixture 2/river/true/1 · 8,192 samples per range · exact seed and model hashes in zone-atlas.json.

DECISION LABORATORY

Heads-up · river · LIKELY

A deeper decision

ACTOR'S POCKET

3 ♠ 3 ♥

RIVER BOARD

4 ♠ 7 ♦ 2 ♣ K ♣ 5 ♥

Original table	Active opponents	Stack	Pot	Call
2	1	1,940	120	0

The made category is **one pair** on a wet board. Check the kicker relationships and which higher categories the board can support.

The pocket is **UNLIKELY** at 5/13 near ranks; the dynamic map is **LIKELY** at 11/13. Their disagreement is a comparison between reference frames, not conflicting forecasts.

Change the assumption

Width	MC share	95% interval	WSRF
100%	45.7%	44.7%–46.8%	44.9%
60%	47.3%	46.2%–48.4%	43.5%
25%	45.4%	44.4%–46.5%	42.7%

Available choices

Action	Est. chips
Check	-7.3
Bet 20	-11.1
Bet 60	-43.4
Bet 120	-94.8
All in · 1940	-786.0

The archived v3 forest suggests **check**. Existing contributions are spent; folding is scored at zero. These values describe its simulated continuations. Compare the full action list with the call price and your range assumption.

A discovery to try

Can the WSRF hint help you explore this decision alongside the price and active field? **Yes.** Its action ranking gives you a concrete starting point. On the river, compare eligible pot share and opposing ranges. Connecting these pieces makes the suggestion easier to understand.

Study fixture 2/river/true/2 · 8,192 samples per range · exact seed and model hashes in zone-atlas.json.

DECISION LABORATORY

Heads-up · river · UNLIKELY

A shorter stack

ACTOR'S POCKET

A ♣ 9 ♦

RIVER BOARD

Q ♦ 8 ♣ 6 ♣ 2 ♥ 4 ♥

Original table	Active opponents	Stack	Pot	Call
2	1	580	40	0

The made category is **high card** on a wet board. The hand needs improvement or a favorable betting path; the rank label alone does not supply showdown strength.

The pocket is **LIKELY** at 8/13 near ranks; the dynamic map is **UNLIKELY** at 5/13. Their disagreement is a comparison between reference frames, not conflicting forecasts.

Change the assumption

Width	MC share	95% interval	WSRF
100%	32.7%	31.7%–33.7%	31.1%
60%	33.3%	32.3%–34.3%	30.7%
25%	30.1%	29.1%–31.1%	30.7%

Available choices

Action	Est. chips
Check	-4.6
Bet 20	-9.4
Bet 40	-18.5
All in · 580	-218.6

The archived v3 forest suggests **check**. Existing contributions are spent; folding is scored at zero. These values describe its simulated continuations. Compare the full action list with the call price and your range assumption.

A discovery to try

Can the WSRF hint help you explore this decision alongside the price and active field? **Yes.** Its action ranking gives you a concrete starting point. On the river, compare eligible pot share and opposing ranges. Connecting these pieces makes the suggestion easier to understand.

Study fixture 2/river/false/0 · 8,192 samples per range · exact seed and model hashes in zone-atlas.json.

DECISION LABORATORY

Heads-up · river · UNLIKELY

Room to maneuver

ACTOR'S POCKET

Q ♣ 5 ♦

RIVER BOARD

K ♣ 9 ♣ 9 ♠ 2 ♣ Q ♦

Original table	Active opponents	Stack	Pot	Call
2	1	1,180	40	0

The made category is **two pair** on a paired board. Check the kicker relationships and which higher categories the board can support.

The pocket is **LIKELY** at 12/13 near ranks; the dynamic map is **UNLIKELY** at 6/13. Their disagreement is a comparison between reference frames, not conflicting forecasts.

Change the assumption

Width	MC share	95% interval	WSRF
100%	68.9%	67.9%–69.9%	67.8%
60%	59.4%	58.4%–60.4%	63.6%
25%	55.2%	54.1%–56.2%	58.7%

Available choices

Action	Est. chips
All in · 1180	+55.9
Bet 40	-10.8
Bet 20	-29.1
Check	-42.4

The archived v3 forest suggests **all in · 1180**. Existing contributions are spent; folding is scored at zero. These values describe its simulated continuations. Compare the full action list with the call price and your range assumption.

A discovery to try

Can the WSRF hint help you explore this decision alongside the price and active field? **Yes.** Its action ranking gives you a concrete starting point. On the river, compare eligible pot share and opposing ranges. Connecting these pieces makes the suggestion easier to understand.

Study fixture 2/river/false/1 · 8,192 samples per range · exact seed and model hashes in zone-atlas.json.

DECISION LABORATORY

Heads-up · river · UNLIKELY

A deeper decision

ACTOR'S POCKET

9 ♦ 7 ♠

RIVER BOARD

Q ♦ T ♥ J ♠ 6 ♦ 2 ♠

Original table	Active opponents	Stack	Pot	Call
2	1	1,940	120	0

The made category is **high card** on a wet board. The hand needs improvement or a favorable betting path; the rank label alone does not supply showdown strength.

The pocket is **LIKELY** at 11/13 near ranks; the dynamic map is **UNLIKELY** at 6/13. Their disagreement is a comparison between reference frames, not conflicting forecasts.

Change the assumption

Width	MC share	95% interval	WSRF
100%	18.8%	17.9%–19.6%	16.5%
60%	9.6%	9.0%–10.3%	6.8%
25%	6.3%	5.8%–6.8%	6.6%

Available choices

Action	Est. chips
Check	+3.6
Bet 20	+0.0
Bet 60	-44.2
Bet 120	-58.8
All in · 1940	-897.3

The archived v3 forest suggests **check**. Existing contributions are spent; folding is scored at zero. These values describe its simulated continuations. Compare the full action list with the call price and your range assumption.

A discovery to try

Can the WSRF hint help you explore this decision alongside the price and active field? **Yes.** Its action ranking gives you a concrete starting point. On the river, compare eligible pot share and opposing ranges. Connecting these pieces makes the suggestion easier to understand.

Study fixture 2/river/false/2 · 8,192 samples per range · exact seed and model hashes in zone-atlas.json.

DECISION LABORATORY

6 seats · preflop · LIKELY

A shorter stack

ACTOR'S POCKET

4 ♣ 5 ♥

PREFLOP BOARD

Flop ahead

Original table	Active opponents	Stack	Pot	Call
6	5	600	30	20

This is a preflop decision. The pocket is offsuit. Its rank relationships do not create a flush advantage by themselves.

The pocket is **LIKELY** at 7/13 near ranks; the dynamic map is **LIKELY** at 7/13. Their matching labels do not imply that the two reference sets or every distance value are identical.

Change the assumption

Width	MC share	95% interval	WSRF
100%	12.6%	11.9%–13.3%	13.4%
60%	14.0%	13.2%–14.7%	13.0%
25%	14.9%	14.1%–15.6%	14.2%

Available choices

Action	Est. chips
Fold	0.0
Raise to 45	-27.3
Raise to 40	-28.0
Raise to 70	-31.9
Call 20	-32.7
All in · 600	-112.7

The archived v3 forest suggests **fold**. Existing contributions are spent; folding is scored at zero. These values describe its simulated continuations. Compare the full action list with the call price and your range assumption.

> **A discovery to try**
>
> Can the WSRF hint help you explore this decision alongside the price and active field? **Yes.** Its action ranking gives you a concrete starting point. On this street, compare price, active opponents, and future betting. Connecting these pieces makes the suggestion easier to understand.

Study fixture 6/preflop/true/0 · 8,192 samples per range · exact seed and model hashes in zone-atlas.json.

DECISION LABORATORY

6 seats · preflop · LIKELY

Room to maneuver

ACTOR'S POCKET

T ♥ K ♦

PREFLOP BOARD

Flop ahead

Original table	Active opponents	Stack	Pot	Call
6	5	1,200	30	20

This is a preflop decision. The pocket is offsuit. Its rank relationships do not create a flush advantage by themselves.

The pocket is **LIKELY** at 11/13 near ranks; the dynamic map is **LIKELY** at 11/13. Their matching labels do not imply that the two reference sets or every distance value are identical.

Change the assumption

Width	MC share	95% interval	WSRF
100%	21.9%	21.0%–22.8%	22.9%
60%	16.8%	16.0%–17.6%	14.8%
25%	14.3%	13.6%–15.1%	14.0%

Available choices

Action	Est. chips
All in · 1200	+117.9
Raise to 45	+73.2
Raise to 70	+70.3
Raise to 40	+70.0
Call 20	+62.2
Fold	0.0

The archived v3 forest suggests **all in · 1200**. Existing contributions are spent; folding is scored at zero. These values describe its simulated continuations. Compare the full action list with the call price and your range assumption.

A discovery to try

Can the WSRF hint help you explore this decision alongside the price and active field? **Yes.** Its action ranking gives you a concrete starting point. On this street, compare price, active opponents, and future betting. Connecting these pieces makes the suggestion easier to understand.

Study fixture 6/preflop/true/1 · 8,192 samples per range · exact seed and model hashes in zone-atlas.json.

DECISION LABORATORY

6 seats · preflop · LIKELY

A deeper decision

ACTOR'S POCKET

9 ♣ Q ♦

PREFLOP BOARD

Flop ahead

Original table	Active opponents	Stack	Pot	Call
6	5	2,000	50	20

This is a preflop decision. The pocket is offsuit. Its rank relationships do not create a flush advantage by themselves.

The pocket is **LIKELY** at 10/13 near ranks; the dynamic map is **LIKELY** at 10/13. Their matching labels do not imply that the two reference sets or every distance value are identical.

Change the assumption

Width	MC share	95% interval	WSRF
100%	18.3%	17.5%–19.1%	18.7%
60%	14.2%	13.4%–14.9%	13.5%
25%	12.1%	11.4%–12.8%	13.5%

Available choices

Action	Est. chips
Fold	0.0
All in · 2000	-27.0
Raise to 90	-127.1
Call 20	-145.5
Raise to 55	-148.8
Raise to 40	-168.5

The archived v3 forest suggests **fold**. Existing contributions are spent; folding is scored at zero. These values describe its simulated continuations. Compare the full action list with the call price and your range assumption.

> **A discovery to try**
>
> Can the WSRF hint help you explore this decision alongside the price and active field? **Yes.** Its action ranking gives you a concrete starting point. On this street, compare price, active opponents, and future betting. Connecting these pieces makes the suggestion easier to understand.

Study fixture 6/preflop/true/2 · 8,192 samples per range · exact seed and model hashes in zone-atlas.json.

DECISION LABORATORY

6 seats · preflop · UNLIKELY

A shorter stack

ACTOR'S POCKET

T ♥ 2 ♦

PREFLOP BOARD

Flop ahead

Original table	Active opponents	Stack	Pot	Call
6	1	580	40	0

This is a preflop decision. The pocket is offsuit. Its rank relationships do not create a flush advantage by themselves.

The pocket is **UNLIKELY** at 6/13 near ranks; the dynamic map is **UNLIKELY** at 6/13. Their matching labels do not imply that the two reference sets or every distance value are identical.

Change the assumption

Width	MC share	95% interval	WSRF
100%	42.6%	41.5%–43.6%	41.8%
60%	35.5%	34.5%–36.5%	34.9%
25%	32.6%	31.6%–33.6%	32.8%

Available choices

Action	Est. chips
Check	-35.5
Raise to 40	-60.7
Raise to 60	-64.2
All in · 600	-100.8

The archived v3 forest suggests **check**. Existing contributions are spent; folding is scored at zero. These values describe its simulated continuations. Compare the full action list with the call price and your range assumption.

A discovery to try

Can the WSRF hint help you explore this decision alongside the price and active field? **Yes.** Its action ranking gives you a concrete starting point. On this street, compare price, active opponents, and future betting. Connecting these pieces makes the suggestion easier to understand.

Study fixture 6/preflop/false/0 · 8,192 samples per range · exact seed and model hashes in zone-atlas.json.

DECISION LABORATORY

6 seats · preflop · UNLIKELY

Room to maneuver

ACTOR'S POCKET

2 ♦ K ♥

PREFLOP BOARD

Flop ahead

Original table	Active opponents	Stack	Pot	Call
6	4	1,200	50	20

This is a preflop decision. The pocket is offsuit. Its rank relationships do not create a flush advantage by themselves.

The pocket is **UNLIKELY** at 5/13 near ranks; the dynamic map is **UNLIKELY** at 5/13. Their matching labels do not imply that the two reference sets or every distance value are identical.

Change the assumption

Width	MC share	95% interval	WSRF
100%	17.5%	16.7%–18.3%	16.6%
60%	13.6%	12.9%–14.4%	13.9%
25%	12.8%	12.1%–13.6%	11.8%

Available choices

Action	Est. chips
Fold	0.0
Raise to 40	-18.5
Call 20	-24.2
Raise to 90	-56.4
All in · 1200	-58.4
Raise to 55	-58.6

The archived v3 forest suggests **fold**. Existing contributions are spent; folding is scored at zero. These values describe its simulated continuations. Compare the full action list with the call price and your range assumption.

A discovery to try

Can the WSRF hint help you explore this decision alongside the price and active field? **Yes.** Its action ranking gives you a concrete starting point. On this street, compare price, active opponents, and future betting. Connecting these pieces makes the suggestion easier to understand.

Study fixture 6/preflop/false/1 · 8,192 samples per range · exact seed and model hashes in zone-atlas.json.

DECISION LABORATORY

6 seats · preflop · UNLIKELY

A deeper decision

ACTOR'S POCKET

2 ♣ 8 ♦

PREFLOP BOARD

Flop ahead

Original table	Active opponents	Stack	Pot	Call
6	5	2,000	30	20

This is a preflop decision. The pocket is offsuit. Its rank relationships do not create a flush advantage by themselves.

The pocket is **UNLIKELY** at 6/13 near ranks; the dynamic map is **UNLIKELY** at 6/13. Their matching labels do not imply that the two reference sets or every distance value are identical.

Change the assumption

Width	MC share	95% interval	WSRF
100%	9.4%	8.8%–10.0%	8.2%
60%	9.2%	8.6%–9.9%	9.9%
25%	9.7%	9.1%–10.3%	9.4%

Available choices

Action	Est. chips
Fold	0.0
Call 20	-44.7
Raise to 45	-61.7
Raise to 40	-62.0
Raise to 70	-68.4
All in · 2000	-335.5

The archived v3 forest suggests **fold**. Existing contributions are spent; folding is scored at zero. These values describe its simulated continuations. Compare the full action list with the call price and your range assumption.

A discovery to try

Can the WSRF hint help you explore this decision alongside the price and active field? **Yes.** Its action ranking gives you a concrete starting point. On this street, compare price, active opponents, and future betting. Connecting these pieces makes the suggestion easier to understand.

Study fixture 6/preflop/false/2 · 8,192 samples per range · exact seed and model hashes in zone-atlas.json.

DECISION LABORATORY

6 seats · flop · LIKELY

A shorter stack

ACTOR'S POCKET

J ♥ Q ♦

FLOP BOARD

J ♣ 7 ♥ 6 ♠

Original table	Active opponents	Stack	Pot	Call
6	2	350	750	0

The made category is **one pair** on a dry board. Check the kicker relationships and which higher categories the board can support.

The pocket is **LIKELY** at 10/13 near ranks; the dynamic map is **LIKELY** at 10/13. Their matching labels do not imply that the two reference sets or every distance value are identical.

Change the assumption

Width	MC share	95% interval	WSRF
100%	66.3%	65.2%–67.3%	64.8%
60%	59.3%	58.2%–60.3%	61.0%
25%	55.7%	54.6%–56.8%	59.0%

Available choices

Action	Est. chips
All in · 350	+760.7
Bet 20	+760.0
Check	+751.7

The archived v3 forest suggests **all in · 350**. Existing contributions are spent; folding is scored at zero. These values describe its simulated continuations. Compare the full action list with the call price and your range assumption.

A discovery to try

Can you count 4 of 47 unseen next cards that change the dynamic label? **Yes.** Enumerating the remaining physical cards gives that exact count. Example ranks: 2. Your map makes the pattern visible.

Study fixture 6/flop/true/0 · 8,192 samples per range · exact seed and model hashes in zone-atlas.json.

DECISION LABORATORY

6 seats · flop · LIKELY

Room to maneuver

ACTOR'S POCKET

J ♦ 8 ♦

FLOP BOARD

3 ♥ K ♦ A ♣

Original table	Active opponents	Stack	Pot	Call
6	1	1,140	120	0

The made category is **high card** on a dry board. The hand needs improvement or a favorable betting path; the rank label alone does not supply showdown strength.

The pocket is **LIKELY** at 10/13 near ranks; the dynamic map is **LIKELY** at 7/13. Their matching labels do not imply that the two reference sets or every distance value are identical.

Change the assumption

Width	MC share	95% interval	WSRF
100%	43.8%	42.8%–44.9%	40.7%
60%	33.4%	32.4%–34.4%	28.2%
25%	28.2%	27.3%–29.2%	28.0%

Available choices

Action	Est. chips
Check	-61.3
Bet 20	-64.1
Bet 60	-86.1
Bet 120	-134.4
All in · 1140	-277.7

The archived v3 forest suggests **check**. Existing contributions are spent; folding is scored at zero. These values describe its simulated continuations. Compare the full action list with the call price and your range assumption.

A discovery to try

Can you count 10 of 47 unseen next cards that change the dynamic label? **Yes.** Enumerating the remaining physical cards gives that exact count. Example ranks: 2, 3, A. Your map makes the pattern visible.

Study fixture 6/flop/true/1 · 8,192 samples per range · exact seed and model hashes in zone-atlas.json.

DECISION LABORATORY

6 seats · flop · LIKELY

A deeper decision

ACTOR'S POCKET

5 ♦ T ♣

FLOP BOARD

6 ♠ A ♦ 8 ♠

Original table	Active opponents	Stack	Pot	Call
6	2	1,980	60	0

The made category is **high card** on a wet board. The hand needs improvement or a favorable betting path; the rank label alone does not supply showdown strength.

The pocket is **LIKELY** at 11/13 near ranks; the dynamic map is **LIKELY** at 7/13. Their matching labels do not imply that the two reference sets or every distance value are identical.

Change the assumption

Width	MC share	95% interval	WSRF
100%	13.0%	12.3%–13.7%	14.0%
60%	9.0%	8.4%–9.6%	10.1%
25%	7.9%	7.4%–8.5%	9.8%

Available choices

Action	Est. chips
Check	-83.9
Bet 30	-98.3
Bet 20	-101.6
Bet 60	-149.0
All in · 1980	-979.4

The archived v3 forest suggests **check**. Existing contributions are spent; folding is scored at zero. These values describe its simulated continuations. Compare the full action list with the call price and your range assumption.

> **A discovery to try**
>
> Can you count 4 of 47 unseen next cards that change the dynamic label? **Yes.** Enumerating the remaining physical cards gives that exact count. Example ranks: 2. Your map makes the pattern visible.

Study fixture 6/flop/true/2 · 8,192 samples per range · exact seed and model hashes in zone-atlas.json.

DECISION LABORATORY

6 seats · flop · UNLIKELY

A shorter stack

ACTOR'S POCKET

A ♠ 9 ♥

FLOP BOARD

5 ♣ 5 ♦ 2 ♦

Original table	Active opponents	Stack	Pot	Call
6	4	580	100	0

The made category is **one pair** on a paired board. Check the kicker relationships and which higher categories the board can support.

The pocket is **LIKELY** at 8/13 near ranks; the dynamic map is **UNLIKELY** at 6/13. Their disagreement is a comparison between reference frames, not conflicting forecasts.

Change the assumption

Width	MC share	95% interval	WSRF
100%	14.5%	13.8%–15.3%	9.5%
60%	12.8%	12.1%–13.4%	9.1%
25%	10.8%	10.2%–11.4%	8.7%

Available choices

Action	Est. chips
Check	-30.1
Bet 20	-67.2
Bet 50	-104.7
Bet 100	-142.6
All in · 580	-198.9

The archived v3 forest suggests **check**. Existing contributions are spent; folding is scored at zero. These values describe its simulated continuations. Compare the full action list with the call price and your range assumption.

A discovery to try

Can you count 0 of 47 unseen next cards that change the dynamic label? **Yes.** Enumerating the remaining physical cards gives that exact count. Every possible next card preserves this label. Your map makes the pattern visible.

Study fixture 6/flop/false/0 · 8,192 samples per range · exact seed and model hashes in zone-atlas.json.

DECISION LABORATORY

6 seats · flop · UNLIKELY

Room to maneuver

ACTOR'S POCKET

J ♠ 4 ♦

FLOP BOARD

9 ♦ 2 ♣ 2 ♥

Original table	Active opponents	Stack	Pot	Call
6	3	1,180	80	0

The made category is **one pair** on a paired board. Check the kicker relationships and which higher categories the board can support.

The pocket is **LIKELY** at 10/13 near ranks; the dynamic map is **UNLIKELY** at 3/13. Their disagreement is a comparison between reference frames, not conflicting forecasts.

Change the assumption

Width	MC share	95% interval	WSRF
100%	9.5%	8.9%–10.1%	8.4%
60%	9.3%	8.6%–9.9%	8.5%
25%	7.0%	6.5%–7.6%	8.5%

Available choices

Action	Est. chips
Check	-70.0
Bet 20	-91.4
Bet 40	-147.4
Bet 80	-231.6
All in · 1180	-555.4

The archived v3 forest suggests **check**. Existing contributions are spent; folding is scored at zero. These values describe its simulated continuations. Compare the full action list with the call price and your range assumption.

A discovery to try

Can you count 0 of 47 unseen next cards that change the dynamic label? **Yes.** Enumerating the remaining physical cards gives that exact count. Every possible next card preserves this label. Your map makes the pattern visible.

Study fixture 6/flop/false/1 · 8,192 samples per range · exact seed and model hashes in zone-atlas.json.

DECISION LABORATORY

6 seats · flop · UNLIKELY

A deeper decision

ACTOR'S POCKET

A ♥ 7 ♥

FLOP BOARD

8 ♥ J ♠ 2 ♥

Original table	Active opponents	Stack	Pot	Call
6	2	1,950	150	0

The made category is **high card** on a wet board. The hand needs improvement or a favorable betting path; the rank label alone does not supply showdown strength.

The pocket is **LIKELY** at 9/13 near ranks; the dynamic map is **UNLIKELY** at 6/13. Their disagreement is a comparison between reference frames, not conflicting forecasts.

Change the assumption

Width	MC share	95% interval	WSRF
100%	52.5%	51.4%–53.6%	41.0%
60%	49.8%	48.7%–50.8%	40.3%
25%	46.4%	45.4%–47.5%	40.0%

Available choices

Action	Est. chips
All in · 1950	+243.3
Bet 150	+228.9
Bet 75	+227.2
Bet 20	+217.1
Check	+209.7

The archived v3 forest suggests **all in · 1950**. Existing contributions are spent; folding is scored at zero. These values describe its simulated continuations. Compare the full action list with the call price and your range assumption.

A discovery to try

Can you count 0 of 47 unseen next cards that change the dynamic label? **Yes.** Enumerating the remaining physical cards gives that exact count. Every possible next card preserves this label. Your map makes the pattern visible.

Study fixture 6/flop/false/2 · 8,192 samples per range · exact seed and model hashes in zone-atlas.json.

DECISION LABORATORY

6 seats · turn · LIKELY

A shorter stack

ACTOR'S POCKET

9 ♥ 8 ♥

TURN BOARD

6 ♠ A ♠ 4 ♥ T ♣

Original table	Active opponents	Stack	Pot	Call
6	3	580	80	0

The made category is **high card** on a wet board. The hand needs improvement or a favorable betting path; the rank label alone does not supply showdown strength.

The pocket is **LIKELY** at 8/13 near ranks; the dynamic map is **LIKELY** at 10/13. Their matching labels do not imply that the two reference sets or every distance value are identical.

Change the assumption

Width	MC share	95% interval	WSRF
100%	12.2%	11.4%–12.9%	10.2%
60%	10.2%	9.5%–10.8%	9.7%
25%	9.6%	8.9%–10.2%	8.9%

Available choices

Action	Est. chips
Check	-17.2
Bet 20	-32.2
Bet 40	-65.6
Bet 80	-112.5
All in · 580	-267.6

The archived v3 forest suggests **check**. Existing contributions are spent; folding is scored at zero. These values describe its simulated continuations. Compare the full action list with the call price and your range assumption.

> **A discovery to try**
>
> Can you count 4 of 46 unseen next cards that change the dynamic label? **Yes.** Enumerating the remaining physical cards gives that exact count. Example ranks: 2. Your map makes the pattern visible.

Study fixture 6/turn/true/0 · 8,192 samples per range · exact seed and model hashes in zone-atlas.json.

DECISION LABORATORY

6 seats · turn · LIKELY

Room to maneuver

ACTOR'S POCKET

T ♦ 6 ♦

TURN BOARD

7 ♠ T ♠ A ♦ T ♣

Original table	Active opponents	Stack	Pot	Call
6	4	970	1,170	0

The made category is **three of a kind** on a paired board. Check the kicker relationships and which higher categories the board can support.

The pocket is **LIKELY** at 9/13 near ranks; the dynamic map is **LIKELY** at 10/13. Their matching labels do not imply that the two reference sets or every distance value are identical.

Change the assumption

Width	MC share	95% interval	WSRF
100%	76.5%	75.6%–77.4%	67.8%
60%	70.1%	69.1%–71.0%	67.0%
25%	65.6%	64.6%–66.6%	66.7%

Available choices

Action	Est. chips
Bet 585	+1283.5
All in · 970	+1282.1
Bet 20	+1242.1
Check	+1228.0

The archived v3 forest suggests **bet 585**. Existing contributions are spent; folding is scored at zero. These values describe its simulated continuations. Compare the full action list with the call price and your range assumption.

> **A discovery to try**
>
> Can you count 4 of 46 unseen next cards that change the dynamic label? **Yes.** Enumerating the remaining physical cards gives that exact count. Example ranks: 2. Your map makes the pattern visible.

Study fixture 6/turn/true/1 · 8,192 samples per range · exact seed and model hashes in zone-atlas.json.

DECISION LABORATORY

6 seats · turn · LIKELY

A deeper decision

ACTOR'S POCKET

4 ♠ 8 ♠

TURN BOARD

A ♥ 6 ♦ Q ♦ K ♣

Original table	Active opponents	Stack	Pot	Call
6	2	1,687	939	0

The made category is **high card** on a wet board. The hand needs improvement or a favorable betting path; the rank label alone does not supply showdown strength.

The pocket is **LIKELY** at 9/13 near ranks; the dynamic map is **LIKELY** at 9/13. Their matching labels do not imply that the two reference sets or every distance value are identical.

Change the assumption

Width	MC share	95% interval	WSRF
100%	5.0%	4.5%–5.4%	4.7%
60%	1.9%	1.6%–2.2%	2.4%
25%	1.2%	1.0%–1.4%	2.4%

Available choices

Action	Est. chips
Check	-91.2
Bet 20	-105.5
Bet 470	-724.1
Bet 939	-756.3
All in · 1687	-903.3

The archived v3 forest suggests **check**. Existing contributions are spent; folding is scored at zero. These values describe its simulated continuations. Compare the full action list with the call price and your range assumption.

> **A discovery to try**
>
> Can you count 4 of 46 unseen next cards that change the dynamic label? **Yes.** Enumerating the remaining physical cards gives that exact count. Example ranks: 2. Your map makes the pattern visible.

Study fixture 6/turn/true/2 · 8,192 samples per range · exact seed and model hashes in zone-atlas.json.

DECISION LABORATORY

6 seats · turn · UNLIKELY

A shorter stack

ACTOR'S POCKET

J ♠ 3 ♦

TURN BOARD

A ♠ 4 ♣ Q ♠ 2 ♦

Original table	Active opponents	Stack	Pot	Call
6	2	351	747	0

The made category is **high card** on a wet board. The hand needs improvement or a favorable betting path; the rank label alone does not supply showdown strength.

The pocket is **LIKELY** at 8/13 near ranks; the dynamic map is **UNLIKELY** at 6/13. Their disagreement is a comparison between reference frames, not conflicting forecasts.

Change the assumption

Width	MC share	95% interval	WSRF
100%	16.5%	15.8%–17.3%	11.6%
60%	13.6%	12.9%–14.3%	11.6%
25%	12.4%	11.7%–13.1%	11.6%

Available choices

Action	Est. chips
Check	-2.8
Bet 20	-22.4
All in · 351	-111.8

The archived v3 forest suggests **check**. Existing contributions are spent; folding is scored at zero. These values describe its simulated continuations. Compare the full action list with the call price and your range assumption.

A discovery to try

Can you count 0 of 46 unseen next cards that change the dynamic label? **Yes.** Enumerating the remaining physical cards gives that exact count. Every possible next card preserves this label. Your map makes the pattern visible.

Study fixture 6/turn/false/0 · 8,192 samples per range · exact seed and model hashes in zone-atlas.json.

DECISION LABORATORY

6 seats · turn · UNLIKELY

Room to maneuver

ACTOR'S POCKET

9 ♦ 3 ♠

TURN BOARD

5 ♠ A ♥ A ♦ 2 ♥

Original table	Active opponents	Stack	Pot	Call
6	3	1,140	240	0

The made category is **one pair** on a paired board. Check the kicker relationships and which higher categories the board can support.

The pocket is **LIKELY** at 8/13 near ranks; the dynamic map is **UNLIKELY** at 4/13. Their disagreement is a comparison between reference frames, not conflicting forecasts.

Change the assumption

Width	MC share	95% interval	WSRF
100%	10.3%	9.7%–10.9%	8.6%
60%	10.5%	9.9%–11.2%	8.5%
25%	10.2%	9.6%–10.9%	8.3%

Available choices

Action	Est. chips
Check	-49.4
Bet 20	-66.7
Bet 120	-261.4
Bet 240	-343.7
All in · 1140	-564.3

The archived v3 forest suggests **check**. Existing contributions are spent; folding is scored at zero. These values describe its simulated continuations. Compare the full action list with the call price and your range assumption.

> **A discovery to try**
>
> Can you count 0 of 46 unseen next cards that change the dynamic label? **Yes.** Enumerating the remaining physical cards gives that exact count. Every possible next card preserves this label. Your map makes the pattern visible.

Study fixture 6/turn/false/1 · 8,192 samples per range · exact seed and model hashes in zone-atlas.json.

DECISION LABORATORY

6 seats · turn · UNLIKELY

A deeper decision

ACTOR'S POCKET

2 ♣ 6 ♥

TURN BOARD

A ♠ 3 ♣ 2 ♦ A ♥

Original table	Active opponents	Stack	Pot	Call
6	2	1,940	200	0

The made category is **two pair** on a paired board. Check the kicker relationships and which higher categories the board can support.

The pocket is **UNLIKELY** at 6/13 near ranks; the dynamic map is **UNLIKELY** at 4/13. Their matching labels do not imply that the two reference sets or every distance value are identical.

Change the assumption

Width	MC share	95% interval	WSRF
100%	31.1%	30.1%–32.1%	39.7%
60%	30.7%	29.7%–31.7%	38.8%
25%	25.9%	25.0%–26.9%	38.8%

Available choices

Action	Est. chips
Bet 200	-243.2
Bet 20	-244.7
Check	-248.4
Bet 100	-305.9
All in · 1940	-333.5

The archived v3 forest suggests **bet 200**. Existing contributions are spent; folding is scored at zero. These values describe its simulated continuations. Compare the full action list with the call price and your range assumption.

A discovery to try

Can you count 39 of 46 unseen next cards that change the dynamic label? **Yes.** Enumerating the remaining physical cards gives that exact count. Example ranks: 4, 5, 6, 7, 8, 9, T, J, Q, K. Your map makes the pattern visible.

Study fixture 6/turn/false/2 · 8,192 samples per range · exact seed and model hashes in zone-atlas.json.

DECISION LABORATORY

6 seats · river · LIKELY

A shorter stack

ACTOR'S POCKET

A ♦ A ♣

RIVER BOARD

2 ♦ 3 ♦ Q ♥ 6 ♠ J ♦

Original table	Active opponents	Stack	Pot	Call
6	1	380	600	0

The made category is **one pair** on a wet board. Check the kicker relationships and which higher categories the board can support.

The pocket is **UNLIKELY** at 5/13 near ranks; the dynamic map is **LIKELY** at 10/13. Their disagreement is a comparison between reference frames, not conflicting forecasts.

Change the assumption

Width	MC share	95% interval	WSRF
100%	84.1%	83.3%–84.9%	83.1%
60%	85.4%	84.6%–86.1%	82.9%
25%	86.1%	85.3%–86.8%	82.9%

Available choices

Action	Est. chips
All in · 380	+723.6
Bet 300	+686.8
Bet 20	+569.1
Check	+563.2

The archived v3 forest suggests **all in · 380**. Existing contributions are spent; folding is scored at zero. These values describe its simulated continuations. Compare the full action list with the call price and your range assumption.

> **A discovery to try**
>
> Can the WSRF hint help you explore this decision alongside the price and active field? **Yes.** Its action ranking gives you a concrete starting point. On the river, compare eligible pot share and opposing ranges. Connecting these pieces makes the suggestion easier to understand.

Study fixture 6/river/true/0 · 8,192 samples per range · exact seed and model hashes in zone-atlas.json.

DECISION LABORATORY

6 seats · river · LIKELY

Room to maneuver

ACTOR'S POCKET

J ♠ 9 ♦

RIVER BOARD

6 ♠ T ♠ 3 ♦ A ♦ Q ♣

Original table	Active opponents	Stack	Pot	Call
6	1	951	543	0

The made category is **high card** on a wet board. The hand needs improvement or a favorable betting path; the rank label alone does not supply showdown strength.

The pocket is **LIKELY** at 9/13 near ranks; the dynamic map is **LIKELY** at 9/13. Their matching labels do not imply that the two reference sets or every distance value are identical.

Change the assumption

Width	MC share	95% interval	WSRF
100%	28.3%	27.3%–29.3%	25.1%
60%	18.1%	17.2%–18.9%	14.8%
25%	14.9%	14.1%–15.6%	14.2%

Available choices

Action	Est. chips
Check	+58.0
Bet 20	+53.8
Bet 272	-128.0
Bet 543	-248.3
All in · 951	-353.3

The archived v3 forest suggests **check**. Existing contributions are spent; folding is scored at zero. These values describe its simulated continuations. Compare the full action list with the call price and your range assumption.

A discovery to try

Can the WSRF hint help you explore this decision alongside the price and active field? **Yes.** Its action ranking gives you a concrete starting point. On the river, compare eligible pot share and opposing ranges. Connecting these pieces makes the suggestion easier to understand.

Study fixture 6/river/true/1 · 8,192 samples per range · exact seed and model hashes in zone-atlas.json.

DECISION LABORATORY

6 seats · river · LIKELY

A deeper decision

ACTOR'S POCKET

3 ♥ Q ♠

RIVER BOARD

9 ♥ 4 ♣ 4 ♦ 6 ♣ A ♥

Original table	Active opponents	Stack	Pot	Call
6	2	1,980	70	0

The made category is **one pair** on a paired board. Check the kicker relationships and which higher categories the board can support.

The pocket is **LIKELY** at 8/13 near ranks; the dynamic map is **LIKELY** at 10/13. Their matching labels do not imply that the two reference sets or every distance value are identical.

Change the assumption

Width	MC share	95% interval	WSRF
100%	11.2%	10.6%–11.9%	8.3%
60%	5.0%	4.6%–5.5%	4.5%
25%	2.9%	2.6%–3.3%	4.3%

Available choices

Action	Est. chips
Check	-30.1
Bet 20	-57.0
Bet 35	-67.9
Bet 70	-111.7
All in · 1980	-1234.8

The archived v3 forest suggests **check**. Existing contributions are spent; folding is scored at zero. These values describe its simulated continuations. Compare the full action list with the call price and your range assumption.

> **A discovery to try**
>
> Can the WSRF hint help you explore this decision alongside the price and active field? **Yes.** Its action ranking gives you a concrete starting point. On the river, compare eligible pot share and opposing ranges. Connecting these pieces makes the suggestion easier to understand.

Study fixture 6/river/true/2 · 8,192 samples per range · exact seed and model hashes in zone-atlas.json.

DECISION LABORATORY

6 seats · river · UNLIKELY

A shorter stack

ACTOR'S POCKET

K ♠ 8 ♣

RIVER BOARD

4 ♦ Q ♣ 9 ♥ 2 ♥ T ♣

Original table	Active opponents	Stack	Pot	Call
6	2	580	60	0

The made category is **high card** on a wet board. The hand needs improvement or a favorable betting path; the rank label alone does not supply showdown strength.

The pocket is **LIKELY** at 8/13 near ranks; the dynamic map is **UNLIKELY** at 6/13. Their disagreement is a comparison between reference frames, not conflicting forecasts.

Change the assumption

Width	MC share	95% interval	WSRF
100%	6.1%	5.6%–6.6%	3.2%
60%	3.6%	3.2%–4.0%	2.7%
25%	1.9%	1.6%–2.2%	2.7%

Available choices

Action	Est. chips
Check	-7.0
Bet 20	-26.5
Bet 30	-40.2
Bet 60	-75.6
All in · 580	-371.5

The archived v3 forest suggests **check**. Existing contributions are spent; folding is scored at zero. These values describe its simulated continuations. Compare the full action list with the call price and your range assumption.

A discovery to try

Can the WSRF hint help you explore this decision alongside the price and active field? **Yes.** Its action ranking gives you a concrete starting point. On the river, compare eligible pot share and opposing ranges. Connecting these pieces makes the suggestion easier to understand.

Study fixture 6/river/false/0 · 8,192 samples per range · exact seed and model hashes in zone-atlas.json.

DECISION LABORATORY

6 seats · river · UNLIKELY

Room to maneuver

ACTOR'S POCKET

3 ♦ 7 ♣

RIVER BOARD

T ♦ 9 ♣ 2 ♦ A ♦ A ♣

Original table	Active opponents	Stack	Pot	Call
6	5	1,180	120	0

The made category is **one pair** on a paired board. Check the kicker relationships and which higher categories the board can support.

The pocket is **LIKELY** at 8/13 near ranks; the dynamic map is **UNLIKELY** at 5/13. Their disagreement is a comparison between reference frames, not conflicting forecasts.

Change the assumption

Width	MC share	95% interval	WSRF
100%	0.0%	0.0%–0.0%	0.0%
60%	0.0%	0.0%–0.0%	0.0%
25%	0.0%	0.0%–0.0%	0.0%

Available choices

Action	Est. chips
Check	-54.7
Bet 20	-58.5
Bet 60	-213.0
Bet 120	-259.3
All in · 1180	-770.6

The archived v3 forest suggests **check**. Existing contributions are spent; folding is scored at zero. These values describe its simulated continuations. Compare the full action list with the call price and your range assumption.

A discovery to try

Can the WSRF hint help you explore this decision alongside the price and active field? **Yes.** Its action ranking gives you a concrete starting point. On the river, compare eligible pot share and opposing ranges. Connecting these pieces makes the suggestion easier to understand.

Study fixture 6/river/false/1 · 8,192 samples per range · exact seed and model hashes in zone-atlas.json.

DECISION LABORATORY

6 seats · river · UNLIKELY

A deeper decision

ACTOR'S POCKET

J ♠ Q ♥

RIVER BOARD

8 ♣ K ♦ J ♥ 4 ♦ 2 ♠

Original table	Active opponents	Stack	Pot	Call
6	2	1,820	600	0

The made category is **one pair** on a wet board. Check the kicker relationships and which higher categories the board can support.

The pocket is **LIKELY** at 10/13 near ranks; the dynamic map is **UNLIKELY** at 5/13. Their disagreement is a comparison between reference frames, not conflicting forecasts.

Change the assumption

Width	MC share	95% interval	WSRF
100%	63.1%	62.0%–64.1%	45.0%
60%	52.0%	50.9%–53.0%	38.7%
25%	44.7%	43.6%–45.8%	38.7%

Available choices

Action	Est. chips
Bet 600	+322.6
Check	+251.6
Bet 20	+251.6
Bet 300	+244.2
All in · 1820	+194.9

The archived v3 forest suggests **bet 600**. Existing contributions are spent; folding is scored at zero. These values describe its simulated continuations. Compare the full action list with the call price and your range assumption.

A discovery to try

Can the WSRF hint help you explore this decision alongside the price and active field? **Yes.** Its action ranking gives you a concrete starting point. On the river, compare eligible pot share and opposing ranges. Connecting these pieces makes the suggestion easier to understand.

Study fixture 6/river/false/2 · 8,192 samples per range · exact seed and model hashes in zone-atlas.json.

DECISION LABORATORY

9 seats · preflop · LIKELY

A shorter stack

ACTOR'S POCKET

4 ♥ J ♦

PREFLOP BOARD

Flop ahead

Original table	Active opponents	Stack	Pot	Call
9	8	600	30	20

This is a preflop decision. The pocket is offsuit. Its rank relationships do not create a flush advantage by themselves.

The pocket is **LIKELY** at 10/13 near ranks; the dynamic map is **LIKELY** at 10/13. Their matching labels do not imply that the two reference sets or every distance value are identical.

Change the assumption

Width	MC share	95% interval	WSRF
100%	7.6%	7.0%–8.1%	7.4%
60%	7.1%	6.6%–7.7%	7.2%
25%	6.5%	6.0%–7.0%	7.3%

Available choices

Action	Est. chips
Fold	0.0
Raise to 70	-54.5
Call 20	-68.8
Raise to 45	-77.1
All in · 600	-82.1
Raise to 40	-85.9

The archived v3 forest suggests **fold**. Existing contributions are spent; folding is scored at zero. These values describe its simulated continuations. Compare the full action list with the call price and your range assumption.

> **A discovery to try**
>
> Can the WSRF hint help you explore this decision alongside the price and active field? **Yes.** Its action ranking gives you a concrete starting point. On this street, compare price, active opponents, and future betting. Connecting these pieces makes the suggestion easier to understand.

Study fixture 9/preflop/true/0 · 8,192 samples per range · exact seed and model hashes in zone-atlas.json.

DECISION LABORATORY

9 seats · preflop · LIKELY

Room to maneuver

ACTOR'S POCKET

7 ♠ Q ♦

PREFLOP BOARD

Flop ahead

Original table	Active opponents	Stack	Pot	Call
9	8	1,200	30	20

This is a preflop decision. The pocket is offsuit. Its rank relationships do not create a flush advantage by themselves.

The pocket is **LIKELY** at 9/13 near ranks; the dynamic map is **LIKELY** at 9/13. Their matching labels do not imply that the two reference sets or every distance value are identical.

Change the assumption

Width	MC share	95% interval	WSRF
100%	8.5%	7.9%–9.1%	8.3%
60%	7.5%	7.0%–8.1%	6.7%
25%	6.2%	5.7%–6.7%	6.5%

Available choices

Action	Est. chips
Fold	0.0
Raise to 45	-34.0
Raise to 40	-45.3
Call 20	-63.5
All in · 1200	-88.4
Raise to 70	-149.5

The archived v3 forest suggests **fold**. Existing contributions are spent; folding is scored at zero. These values describe its simulated continuations. Compare the full action list with the call price and your range assumption.

> **A discovery to try**
>
> Can the WSRF hint help you explore this decision alongside the price and active field? **Yes.** Its action ranking gives you a concrete starting point. On this street, compare price, active opponents, and future betting. Connecting these pieces makes the suggestion easier to understand.

Study fixture 9/preflop/true/1 · 8,192 samples per range · exact seed and model hashes in zone-atlas.json.

DECISION LABORATORY

9 seats · preflop · LIKELY

A deeper decision

ACTOR'S POCKET

6 ♥ 5 ♠

PREFLOP BOARD

Flop ahead

Original table	Active opponents	Stack	Pot	Call
9	8	2,000	30	20

This is a preflop decision. The pocket is offsuit. Its rank relationships do not create a flush advantage by themselves.

The pocket is **LIKELY** at 9/13 near ranks; the dynamic map is **LIKELY** at 9/13. Their matching labels do not imply that the two reference sets or every distance value are identical.

Change the assumption

Width	MC share	95% interval	WSRF
100%	9.4%	8.8%–10.0%	8.6%
60%	11.2%	10.5%–11.8%	11.8%
25%	13.0%	12.3%–13.7%	12.8%

Available choices

Action	Est. chips
Fold	0.0
Raise to 70	-37.1
Raise to 45	-53.9
Raise to 40	-66.7
Call 20	-70.0
All in · 2000	-261.2

The archived v3 forest suggests **fold**. Existing contributions are spent; folding is scored at zero. These values describe its simulated continuations. Compare the full action list with the call price and your range assumption.

> **A discovery to try**
>
> Can the WSRF hint help you explore this decision alongside the price and active field? **Yes.** Its action ranking gives you a concrete starting point. On this street, compare price, active opponents, and future betting. Connecting these pieces makes the suggestion easier to understand.

Study fixture 9/preflop/true/2 · 8,192 samples per range · exact seed and model hashes in zone-atlas.json.

DECISION LABORATORY

9 seats · preflop · UNLIKELY

A shorter stack

ACTOR'S POCKET

Q ♦ 2 ♥

PREFLOP BOARD

Flop ahead

Original table	Active opponents	Stack	Pot	Call
9	8	600	30	20

This is a preflop decision. The pocket is offsuit. Its rank relationships do not create a flush advantage by themselves.

The pocket is **UNLIKELY** at 6/13 near ranks; the dynamic map is **UNLIKELY** at 6/13. Their matching labels do not imply that the two reference sets or every distance value are identical.

Change the assumption

Width	MC share	95% interval	WSRF
100%	7.6%	7.0%–8.1%	8.0%
60%	7.3%	6.7%–7.8%	6.8%
25%	5.7%	5.2%–6.2%	6.4%

Available choices

Action	Est. chips
Fold	0.0
Raise to 45	-72.9
Raise to 40	-74.1
Call 20	-77.2
Raise to 70	-100.2
All in · 600	-100.8

The archived v3 forest suggests **fold**. Existing contributions are spent; folding is scored at zero. These values describe its simulated continuations. Compare the full action list with the call price and your range assumption.

A discovery to try

Can the WSRF hint help you explore this decision alongside the price and active field? **Yes.** Its action ranking gives you a concrete starting point. On this street, compare price, active opponents, and future betting. Connecting these pieces makes the suggestion easier to understand.

Study fixture 9/preflop/false/0 · 8,192 samples per range · exact seed and model hashes in zone-atlas.json.

DECISION LABORATORY

9 seats · preflop · UNLIKELY

Room to maneuver

ACTOR'S POCKET

2 ♣ Q ♣

PREFLOP BOARD

Flop ahead

Original table	Active opponents	Stack	Pot	Call
9	5	1,190	110	10

This is a preflop decision. The suited pocket shares a suit, which creates possibilities absent from the offsuit version with the same map.

The pocket is **UNLIKELY** at 6/13 near ranks; the dynamic map is **UNLIKELY** at 6/13. Their matching labels do not imply that the two reference sets or every distance value are identical.

Change the assumption

Width	MC share	95% interval	WSRF
100%	16.4%	15.6%–17.2%	16.2%
60%	14.6%	13.8%–15.3%	15.1%
25%	13.0%	12.3%–13.8%	15.1%

Available choices

Action	Est. chips
Fold	0.0
Call 10	-0.2
Raise to 40	-19.7
Raise to 80	-94.7
Raise to 140	-102.7
All in · 1200	-171.5

The archived v3 forest suggests **fold**. Existing contributions are spent; folding is scored at zero. These values describe its simulated continuations. Compare the full action list with the call price and your range assumption.

A discovery to try

Can the WSRF hint help you explore this decision alongside the price and active field? **Yes.** Its action ranking gives you a concrete starting point. On this street, compare price, active opponents, and future betting. Connecting these pieces makes the suggestion easier to understand.

Study fixture 9/preflop/false/1 · 8,192 samples per range · exact seed and model hashes in zone-atlas.json.

DECISION LABORATORY

9 seats · preflop · UNLIKELY

A deeper decision

ACTOR'S POCKET

9 ♣ 2 ♠

PREFLOP BOARD

Flop ahead

Original table	Active opponents	Stack	Pot	Call
9	8	2,000	30	20

This is a preflop decision. The pocket is offsuit. Its rank relationships do not create a flush advantage by themselves.

The pocket is **UNLIKELY** at 6/13 near ranks; the dynamic map is **UNLIKELY** at 6/13. Their matching labels do not imply that the two reference sets or every distance value are identical.

Change the assumption

Width	MC share	95% interval	WSRF
100%	5.8%	5.3%–6.3%	6.2%
60%	6.4%	5.8%–6.9%	6.5%
25%	6.2%	5.7%–6.8%	6.6%

Available choices

Action	Est. chips
Fold	0.0
Raise to 40	-29.9
Raise to 45	-35.9
Raise to 70	-44.0
Call 20	-46.7
All in · 2000	-152.0

The archived v3 forest suggests **fold**. Existing contributions are spent; folding is scored at zero. These values describe its simulated continuations. Compare the full action list with the call price and your range assumption.

A discovery to try

Can the WSRF hint help you explore this decision alongside the price and active field? **Yes.** Its action ranking gives you a concrete starting point. On this street, compare price, active opponents, and future betting. Connecting these pieces makes the suggestion easier to understand.

Study fixture 9/preflop/false/2 · 8,192 samples per range · exact seed and model hashes in zone-atlas.json.

DECISION LABORATORY

9 seats · flop · LIKELY

A shorter stack

ACTOR'S POCKET

J ♣ 7 ♦

FLOP BOARD

Q ♥ 4 ♠ 8 ♦

Original table	Active opponents	Stack	Pot	Call
9	4	580	100	0

The made category is **high card** on a dry board. The hand needs improvement or a favorable betting path; the rank label alone does not supply showdown strength.

The pocket is **LIKELY** at 10/13 near ranks; the dynamic map is **LIKELY** at 9/13. Their matching labels do not imply that the two reference sets or every distance value are identical.

Change the assumption

Width	MC share	95% interval	WSRF
100%	7.1%	6.5%–7.6%	6.3%
60%	5.4%	4.9%–5.9%	6.0%
25%	4.8%	4.3%–5.2%	6.0%

Available choices

Action	Est. chips
Check	-22.5
Bet 20	-62.3
Bet 50	-88.9
Bet 100	-155.9
All in · 580	-240.4

The archived v3 forest suggests **check**. Existing contributions are spent; folding is scored at zero. These values describe its simulated continuations. Compare the full action list with the call price and your range assumption.

> **A discovery to try**
>
> Can you count 4 of 47 unseen next cards that change the dynamic label? **Yes.** Enumerating the remaining physical cards gives that exact count. Example ranks: 2. Your map makes the pattern visible.

Study fixture 9/flop/true/0 · 8,192 samples per range · exact seed and model hashes in zone-atlas.json.

DECISION LABORATORY

9 seats · flop · LIKELY

Room to maneuver

ACTOR'S POCKET

J ♦ 5 ♠

FLOP BOARD

K ♦ 8 ♦ K ♣

Original table	Active opponents	Stack	Pot	Call
9	6	1,180	140	0

The made category is **one pair** on a paired board. Check the kicker relationships and which higher categories the board can support.

The pocket is **LIKELY** at 12/13 near ranks; the dynamic map is **LIKELY** at 8/13. Their matching labels do not imply that the two reference sets or every distance value are identical.

Change the assumption

Width	MC share	95% interval	WSRF
100%	6.0%	5.5%–6.5%	3.2%
60%	3.2%	2.8%–3.6%	2.1%
25%	2.0%	1.8%–2.3%	1.9%

Available choices

Action	Est. chips
Check	-131.9
Bet 20	-162.8
Bet 70	-261.6
Bet 140	-304.3
All in · 1180	-624.0

The archived v3 forest suggests **check**. Existing contributions are spent; folding is scored at zero. These values describe its simulated continuations. Compare the full action list with the call price and your range assumption.

A discovery to try

Can you count 4 of 47 unseen next cards that change the dynamic label? **Yes.** Enumerating the remaining physical cards gives that exact count. Example ranks: 2. Your map makes the pattern visible.

Study fixture 9/flop/true/1 · 8,192 samples per range · exact seed and model hashes in zone-atlas.json.

DECISION LABORATORY

9 seats · flop · LIKELY

A deeper decision

ACTOR'S POCKET

T ♥ 8 ♣

FLOP BOARD

K ♥ 8 ♦ 6 ♥

Original table	Active opponents	Stack	Pot	Call
9	4	1,980	100	0

The made category is **one pair** on a wet board. Check the kicker relationships and which higher categories the board can support.

The pocket is **LIKELY** at 9/13 near ranks; the dynamic map is **LIKELY** at 10/13. Their matching labels do not imply that the two reference sets or every distance value are identical.

Change the assumption

Width	MC share	95% interval	WSRF
100%	28.8%	27.8%–29.8%	24.0%
60%	21.8%	20.9%–22.6%	20.5%
25%	17.2%	16.4%–18.0%	20.0%

Available choices

Action	Est. chips
Check	-113.1
Bet 20	-121.5
Bet 50	-154.0
All in · 1980	-173.8
Bet 100	-214.8

The archived v3 forest suggests **check**. Existing contributions are spent; folding is scored at zero. These values describe its simulated continuations. Compare the full action list with the call price and your range assumption.

> **A discovery to try**
>
> Can you count 4 of 47 unseen next cards that change the dynamic label? **Yes.** Enumerating the remaining physical cards gives that exact count. Example ranks: 2. Your map makes the pattern visible.

Study fixture 9/flop/true/2 · 8,192 samples per range · exact seed and model hashes in zone-atlas.json.

DECISION LABORATORY

9 seats · flop · UNLIKELY

A shorter stack

ACTOR'S POCKET

5 ♥ J ♥

FLOP BOARD

9 ♦ 2 ♥ K ♠

Original table	Active opponents	Stack	Pot	Call
9	1	580	40	0

The made category is **high card** on a dry board. The hand needs improvement or a favorable betting path; the rank label alone does not supply showdown strength.

The pocket is **LIKELY** at 12/13 near ranks; the dynamic map is **UNLIKELY** at 5/13. Their disagreement is a comparison between reference frames, not conflicting forecasts.

Change the assumption

Width	MC share	95% interval	WSRF
100%	37.9%	36.9%–39.0%	35.1%
60%	29.3%	28.3%–30.2%	26.0%
25%	24.7%	23.8%–25.6%	25.8%

Available choices

Action	Est. chips
Check	-17.1
Bet 20	-27.2
Bet 40	-54.9
All in · 580	-141.5

The archived v3 forest suggests **check**. Existing contributions are spent; folding is scored at zero. These values describe its simulated continuations. Compare the full action list with the call price and your range assumption.

A discovery to try

Can you count 44 of 47 unseen next cards that change the dynamic label? **Yes.** Enumerating the remaining physical cards gives that exact count. Example ranks: 3, 4, 5, 6, 7, 8, 9, T, J, Q, K, A. Your map makes the pattern visible.

Study fixture 9/flop/false/0 · 8,192 samples per range · exact seed and model hashes in zone-atlas.json.

DECISION LABORATORY

9 seats · flop · UNLIKELY

Room to maneuver

ACTOR'S POCKET

3 ♠ Q ♣

FLOP BOARD

5 ♣ 3 ♦ 4 ♦

Original table	Active opponents	Stack	Pot	Call
9	7	1,180	160	0

The made category is **one pair** on a wet board. Check the kicker relationships and which higher categories the board can support.

The pocket is **LIKELY** at 8/13 near ranks; the dynamic map is **UNLIKELY** at 5/13. Their disagreement is a comparison between reference frames, not conflicting forecasts.

Change the assumption

Width	MC share	95% interval	WSRF
100%	6.6%	6.1%–7.1%	10.7%
60%	7.9%	7.3%–8.5%	10.8%
25%	8.0%	7.5%–8.6%	11.0%

Available choices

Action	Est. chips
Check	-52.5
Bet 20	-72.5
Bet 80	-226.4
Bet 160	-250.2
All in · 1180	-346.2

The archived v3 forest suggests **check**. Existing contributions are spent; folding is scored at zero. These values describe its simulated continuations. Compare the full action list with the call price and your range assumption.

A discovery to try

Can you count 41 of 47 unseen next cards that change the dynamic label? **Yes.** Enumerating the remaining physical cards gives that exact count. Example ranks: 4, 6, 7, 8, 9, T, J, K, A, 5, Q. Your map makes the pattern visible.

Study fixture 9/flop/false/1 · 8,192 samples per range · exact seed and model hashes in zone-atlas.json.

DECISION LABORATORY

9 seats · flop · UNLIKELY

A deeper decision

ACTOR'S POCKET

9 ♣ 8 ♦

FLOP BOARD

6 ♦ A ♦ A ♣

Original table	Active opponents	Stack	Pot	Call
9	4	1,980	100	0

The made category is **one pair** on a paired board. Check the kicker relationships and which higher categories the board can support.

The pocket is **LIKELY** at 8/13 near ranks; the dynamic map is **UNLIKELY** at 5/13. Their disagreement is a comparison between reference frames, not conflicting forecasts.

Change the assumption

Width	MC share	95% interval	WSRF
100%	12.5%	11.8%–13.2%	7.1%
60%	8.3%	7.7%–8.9%	6.4%
25%	5.9%	5.4%–6.4%	6.0%

Available choices

Action	Est. chips
Bet 20	-48.4
Check	-48.8
Bet 50	-106.1
Bet 100	-200.8
All in · 1980	-776.9

The archived v3 forest suggests **bet 20**. Existing contributions are spent; folding is scored at zero. These values describe its simulated continuations. Compare the full action list with the call price and your range assumption.

A discovery to try

Can you count 37 of 47 unseen next cards that change the dynamic label? **Yes.** Enumerating the remaining physical cards gives that exact count. Example ranks: 4, 5, 6, 7, 8, T, J, Q, K, 9. Your map makes the pattern visible.

Study fixture 9/flop/false/2 · 8,192 samples per range · exact seed and model hashes in zone-atlas.json.

DECISION LABORATORY

9 seats · turn · LIKELY

A shorter stack

ACTOR'S POCKET

9 ♦ J ♣

TURN BOARD

6 ♦ 5 ♠ 4 ♣ 8 ♦

Original table	Active opponents	Stack	Pot	Call
9	2	555	135	0

The made category is **high card** on a wet board. The hand needs improvement or a favorable betting path; the rank label alone does not supply showdown strength.

The pocket is **LIKELY** at 9/13 near ranks; the dynamic map is **LIKELY** at 9/13. Their matching labels do not imply that the two reference sets or every distance value are identical.

Change the assumption

Width	MC share	95% interval	WSRF
100%	13.4%	12.7%–14.1%	18.9%
60%	12.2%	11.5%–12.9%	18.1%
25%	12.7%	12.0%–13.4%	18.1%

Available choices

Action	Est. chips
Check	-9.0
Bet 20	-26.8
Bet 68	-93.2
Bet 135	-112.6
All in · 555	-190.3

The archived v3 forest suggests **check**. Existing contributions are spent; folding is scored at zero. These values describe its simulated continuations. Compare the full action list with the call price and your range assumption.

> **A discovery to try**
>
> Can you count 4 of 46 unseen next cards that change the dynamic label? **Yes.** Enumerating the remaining physical cards gives that exact count. Example ranks: 2. Your map makes the pattern visible.

Study fixture 9/turn/true/0 · 8,192 samples per range · exact seed and model hashes in zone-atlas.json.

DECISION LABORATORY

9 seats · turn · LIKELY

Room to maneuver

ACTOR'S POCKET

Q ♣ K ♣

TURN BOARD

T ♥ 7 ♦ 4 ♠ 8 ♠

Original table	Active opponents	Stack	Pot	Call
9	4	1,180	100	0

The made category is **high card** on a wet board. The hand needs improvement or a favorable betting path; the rank label alone does not supply showdown strength.

The pocket is **LIKELY** at 9/13 near ranks; the dynamic map is **LIKELY** at 9/13. Their matching labels do not imply that the two reference sets or every distance value are identical.

Change the assumption

Width	MC share	95% interval	WSRF
100%	6.7%	6.1%–7.2%	5.8%
60%	4.8%	4.4%–5.3%	5.4%
25%	3.4%	3.0%–3.8%	5.4%

Available choices

Action	Est. chips
Check	-39.6
Bet 20	-50.4
Bet 50	-100.0
Bet 100	-175.7
All in · 1180	-704.9

The archived v3 forest suggests **check**. Existing contributions are spent; folding is scored at zero. These values describe its simulated continuations. Compare the full action list with the call price and your range assumption.

A discovery to try

Can you count 4 of 46 unseen next cards that change the dynamic label? **Yes.** Enumerating the remaining physical cards gives that exact count. Example ranks: 2. Your map makes the pattern visible.

Study fixture 9/turn/true/1 · 8,192 samples per range · exact seed and model hashes in zone-atlas.json.

DECISION LABORATORY

9 seats · turn · LIKELY

A deeper decision

ACTOR'S POCKET

A ♠ 9 ♣

TURN BOARD

9 ♦ K ♥ K ♣ 3 ♥

Original table	Active opponents	Stack	Pot	Call
9	1	1,511	1,103	0

The made category is **two pair** on a paired board. Check the kicker relationships and which higher categories the board can support.

The pocket is **LIKELY** at 8/13 near ranks; the dynamic map is **LIKELY** at 7/13. Their matching labels do not imply that the two reference sets or every distance value are identical.

Change the assumption

Width	MC share	95% interval	WSRF
100%	83.3%	82.5%–84.1%	80.2%
60%	74.5%	73.6%–75.4%	76.3%
25%	68.4%	67.4%–69.4%	75.0%

Available choices

Action	Est. chips
All in · 1511	+1295.8
Bet 1103	+1276.4
Bet 552	+1266.3
Bet 20	+1193.3
Check	+1178.9

The archived v3 forest suggests **all in · 1511**. Existing contributions are spent; folding is scored at zero. These values describe its simulated continuations. Compare the full action list with the call price and your range assumption.

A discovery to try

Can you count 18 of 46 unseen next cards that change the dynamic label? **Yes.** Enumerating the remaining physical cards gives that exact count. Example ranks: 2, 3, 4, 5, A. Your map makes the pattern visible.

Study fixture 9/turn/true/2 · 8,192 samples per range · exact seed and model hashes in zone-atlas.json.

DECISION LABORATORY

9 seats · turn · UNLIKELY

A shorter stack

ACTOR'S POCKET

J ♦ A ♠

TURN BOARD

T ♣ 8 ♣ 3 ♥ 3 ♠

Original table	Active opponents	Stack	Pot	Call
9	4	580	100	0

The made category is **one pair** on a paired board. Check the kicker relationships and which higher categories the board can support.

The pocket is **LIKELY** at 10/13 near ranks; the dynamic map is **UNLIKELY** at 5/13. Their disagreement is a comparison between reference frames, not conflicting forecasts.

Change the assumption

Width	MC share	95% interval	WSRF
100%	11.8%	11.1%–12.5%	7.0%
60%	9.5%	8.9%–10.2%	6.6%
25%	7.2%	6.7%–7.7%	6.6%

Available choices

Action	Est. chips
Check	-32.1
Bet 20	-47.0
Bet 50	-136.9
Bet 100	-160.5
All in · 580	-303.9

The archived v3 forest suggests **check**. Existing contributions are spent; folding is scored at zero. These values describe its simulated continuations. Compare the full action list with the call price and your range assumption.

A discovery to try

Can you count 29 of 46 unseen next cards that change the dynamic label? **Yes.** Enumerating the remaining physical cards gives that exact count. Example ranks: 6, 7, 9, J, Q, K, 8, T. Your map makes the pattern visible.

Study fixture 9/turn/false/0 · 8,192 samples per range · exact seed and model hashes in zone-atlas.json.

DECISION LABORATORY

9 seats · turn · UNLIKELY

Room to maneuver

ACTOR'S POCKET

7 ♠ K ♣

TURN BOARD

7 ♥ T ♦ A ♠ 3 ♠

Original table	Active opponents	Stack	Pot	Call
9	5	1,180	120	0

The made category is **one pair** on a wet board. Check the kicker relationships and which higher categories the board can support.

The pocket is **LIKELY** at 9/13 near ranks; the dynamic map is **UNLIKELY** at 6/13. Their disagreement is a comparison between reference frames, not conflicting forecasts.

Change the assumption

Width	MC share	95% interval	WSRF
100%	16.1%	15.4%–16.9%	13.1%
60%	9.3%	8.7%–9.9%	11.7%
25%	7.5%	7.0%–8.1%	11.2%

Available choices

Action	Est. chips
Check	-185.0
Bet 20	-191.4
Bet 60	-279.7
Bet 120	-349.6
All in · 1180	-534.2

The archived v3 forest suggests **check**. Existing contributions are spent; folding is scored at zero. These values describe its simulated continuations. Compare the full action list with the call price and your range assumption.

A discovery to try

Can you count 28 of 46 unseen next cards that change the dynamic label? **Yes.** Enumerating the remaining physical cards gives that exact count. Example ranks: 6, 7, 8, 9, T, J, Q, K. Your map makes the pattern visible.

Study fixture 9/turn/false/1 · 8,192 samples per range · exact seed and model hashes in zone-atlas.json.

DECISION LABORATORY

9 seats · turn · UNLIKELY

A deeper decision

ACTOR'S POCKET

4 ♣ 2 ♠

TURN BOARD

K ♠ J ♦ 2 ♦ Q ♦

Original table	Active opponents	Stack	Pot	Call
9	1	1,890	240	0

The made category is **one pair** on a wet board. Check the kicker relationships and which higher categories the board can support.

The pocket is **UNLIKELY** at 5/13 near ranks; the dynamic map is **UNLIKELY** at 6/13. Their matching labels do not imply that the two reference sets or every distance value are identical.

Change the assumption

Width	MC share	95% interval	WSRF
100%	41.0%	40.0%–42.1%	44.3%
60%	29.7%	28.7%–30.7%	37.2%
25%	26.6%	25.6%–27.5%	34.5%

Available choices

Action	Est. chips
Check	-184.7
Bet 20	-184.7
Bet 120	-248.3
Bet 240	-293.2
All in · 1890	-557.9

The archived v3 forest suggests **check**. Existing contributions are spent; folding is scored at zero. These values describe its simulated continuations. Compare the full action list with the call price and your range assumption.

A discovery to try

Can you count 44 of 46 unseen next cards that change the dynamic label? **Yes.** Enumerating the remaining physical cards gives that exact count. Example ranks: 3, 5, 6, 7, 8, 9, T, J, Q, K, A, 4. Your map makes the pattern visible.

Study fixture 9/turn/false/2 · 8,192 samples per range · exact seed and model hashes in zone-atlas.json.

DECISION LABORATORY

9 seats · river · LIKELY

A shorter stack

ACTOR'S POCKET

Q ♦ 8 ♥

RIVER BOARD

5 ♥ 7 ♥ 6 ♣ 3 ♥ 6 ♠

Original table	Active opponents	Stack	Pot	Call
9	1	580	40	0

The made category is **one pair** on a paired board. Check the kicker relationships and which higher categories the board can support.

The pocket is **LIKELY** at 9/13 near ranks; the dynamic map is **LIKELY** at 7/13. Their matching labels do not imply that the two reference sets or every distance value are identical.

Change the assumption

Width	MC share	95% interval	WSRF
100%	13.6%	12.9%–14.3%	14.2%
60%	12.7%	12.0%–13.4%	15.5%
25%	11.6%	10.9%–12.3%	15.2%

Available choices

Action	Est. chips
Check	-2.0
Bet 20	-27.9
Bet 40	-33.3
All in · 580	-301.4

The archived v3 forest suggests **check**. Existing contributions are spent; folding is scored at zero. These values describe its simulated continuations. Compare the full action list with the call price and your range assumption.

> **A discovery to try**
>
> Can the WSRF hint help you explore this decision alongside the price and active field? **Yes.** Its action ranking gives you a concrete starting point. On the river, compare eligible pot share and opposing ranges. Connecting these pieces makes the suggestion easier to understand.

Study fixture 9/river/true/0 · 8,192 samples per range · exact seed and model hashes in zone-atlas.json.

DECISION LABORATORY

9 seats · river · LIKELY

Room to maneuver

ACTOR'S POCKET

8 ♦ 6 ♥

RIVER BOARD

6 ♠ K ♥ 9 ♦ A ♣ 7 ♣

Original table	Active opponents	Stack	Pot	Call
9	2	1,030	550	0

The made category is **one pair** on a wet board. Check the kicker relationships and which higher categories the board can support.

The pocket is **LIKELY** at 10/13 near ranks; the dynamic map is **LIKELY** at 9/13. Their matching labels do not imply that the two reference sets or every distance value are identical.

Change the assumption

Width	MC share	95% interval	WSRF
100%	17.9%	17.1%–18.7%	15.4%
60%	10.2%	9.5%–10.8%	14.6%
25%	7.3%	6.8%–7.9%	14.3%

Available choices

Action	Est. chips
Check	-67.6
Bet 20	-73.3
Bet 275	-318.5
Bet 550	-473.3
All in · 1030	-572.7

The archived v3 forest suggests **check**. Existing contributions are spent; folding is scored at zero. These values describe its simulated continuations. Compare the full action list with the call price and your range assumption.

A discovery to try

Can the WSRF hint help you explore this decision alongside the price and active field? **Yes.** Its action ranking gives you a concrete starting point. On the river, compare eligible pot share and opposing ranges. Connecting these pieces makes the suggestion easier to understand.

Study fixture 9/river/true/1 · 8,192 samples per range · exact seed and model hashes in zone-atlas.json.

DECISION LABORATORY

9 seats · river · LIKELY

A deeper decision

ACTOR'S POCKET

T ♣ 9 ♦

RIVER BOARD

T ♠ K ♠ 4 ♥ 7 ♥ 4 ♣

Original table	Active opponents	Stack	Pot	Call
9	2	1,940	200	0

The made category is **two pair** on a paired board. Check the kicker relationships and which higher categories the board can support.

The pocket is **LIKELY** at 8/13 near ranks; the dynamic map is **LIKELY** at 8/13. Their matching labels do not imply that the two reference sets or every distance value are identical.

Change the assumption

Width	MC share	95% interval	WSRF
100%	51.4%	50.4%–52.5%	37.2%
60%	42.4%	41.4%–43.5%	32.4%
25%	35.4%	34.4%–36.4%	31.9%

Available choices

Action	Est. chips
Check	-19.7
All in · 1940	-43.6
Bet 20	-62.8
Bet 100	-107.3
Bet 200	-114.0

The archived v3 forest suggests **check**. Existing contributions are spent; folding is scored at zero. These values describe its simulated continuations. Compare the full action list with the call price and your range assumption.

> **A discovery to try**
>
> Can the WSRF hint help you explore this decision alongside the price and active field? **Yes.** Its action ranking gives you a concrete starting point. On the river, compare eligible pot share and opposing ranges. Connecting these pieces makes the suggestion easier to understand.

Study fixture 9/river/true/2 · 8,192 samples per range · exact seed and model hashes in zone-atlas.json.

DECISION LABORATORY

9 seats · river · UNLIKELY

A shorter stack

ACTOR'S POCKET

K ♦ 6 ♥

RIVER BOARD

3 ♠ 4 ♠ 3 ♣ 2 ♦ 9 ♦

Original table	Active opponents	Stack	Pot	Call
9	1	550	120	0

The made category is **one pair** on a paired board. Check the kicker relationships and which higher categories the board can support.

The pocket is **LIKELY** at 11/13 near ranks; the dynamic map is **UNLIKELY** at 6/13. Their disagreement is a comparison between reference frames, not conflicting forecasts.

Change the assumption

Width	MC share	95% interval	WSRF
100%	32.2%	31.1%–33.2%	30.3%
60%	30.8%	29.8%–31.8%	27.8%
25%	25.8%	24.9%–26.8%	26.9%

Available choices

Action	Est. chips
Check	-14.3
Bet 20	-16.8
Bet 60	-30.8
Bet 120	-66.6
All in · 550	-240.5

The archived v3 forest suggests **check**. Existing contributions are spent; folding is scored at zero. These values describe its simulated continuations. Compare the full action list with the call price and your range assumption.

A discovery to try

Can the WSRF hint help you explore this decision alongside the price and active field? **Yes.** Its action ranking gives you a concrete starting point. On the river, compare eligible pot share and opposing ranges. Connecting these pieces makes the suggestion easier to understand.

Study fixture 9/river/false/0 · 8,192 samples per range · exact seed and model hashes in zone-atlas.json.

DECISION LABORATORY

9 seats · river · UNLIKELY

Room to maneuver

ACTOR'S POCKET

6 ♥ J ♥

RIVER BOARD

3 ♦ K ♦ 3 ♣ A ♥ A ♦

Original table	Active opponents	Stack	Pot	Call
9	5	1,180	120	0

The made category is **two pair** on a paired board. Check the kicker relationships and which higher categories the board can support.

The pocket is **LIKELY** at 10/13 near ranks; the dynamic map is **UNLIKELY** at 5/13. Their disagreement is a comparison between reference frames, not conflicting forecasts.

Change the assumption

Width	MC share	95% interval	WSRF
100%	1.3%	1.2%–1.4%	0.9%
60%	0.4%	0.3%–0.4%	0.9%
25%	0.1%	0.1%–0.2%	0.9%

Available choices

Action	Est. chips
Check	-127.7
Bet 20	-130.9
Bet 60	-253.9
Bet 120	-272.7
All in · 1180	-706.5

The archived v3 forest suggests **check**. Existing contributions are spent; folding is scored at zero. These values describe its simulated continuations. Compare the full action list with the call price and your range assumption.

A discovery to try

Can the WSRF hint help you explore this decision alongside the price and active field? **Yes.** Its action ranking gives you a concrete starting point. On the river, compare eligible pot share and opposing ranges. Connecting these pieces makes the suggestion easier to understand.

Study fixture 9/river/false/1 · 8,192 samples per range · exact seed and model hashes in zone-atlas.json.

DECISION LABORATORY

9 seats · river · UNLIKELY

A deeper decision

ACTOR'S POCKET

5 ♦ 5 ♣

RIVER BOARD

Q ♥ K ♦ Q ♦ 2 ♣ 2 ♥

Original table	Active opponents	Stack	Pot	Call
9	2	1,940	200	0

The made category is **two pair** on a paired board. Check the kicker relationships and which higher categories the board can support.

The pocket is **LIKELY** at 9/13 near ranks; the dynamic map is **UNLIKELY** at 3/13. Their disagreement is a comparison between reference frames, not conflicting forecasts.

Change the assumption

Width	MC share	95% interval	WSRF
100%	44.0%	42.9%–45.0%	6.6%
60%	32.9%	31.9%–33.9%	5.8%
25%	25.8%	24.8%–26.7%	5.6%

Available choices

Action	Est. chips
Check	-104.2
Bet 20	-105.9
Bet 200	-171.3
Bet 100	-175.3
All in · 1940	-735.4

The archived v3 forest suggests **check**. Existing contributions are spent; folding is scored at zero. These values describe its simulated continuations. Compare the full action list with the call price and your range assumption.

A discovery to try

Can the WSRF hint help you explore this decision alongside the price and active field? **Yes.** Its action ranking gives you a concrete starting point. On the river, compare eligible pot share and opposing ranges. Connecting these pieces makes the suggestion easier to understand.

Study fixture 9/river/false/2 · 8,192 samples per range · exact seed and model hashes in zone-atlas.json.

ZONE JOURNEYS

Journey 01 · held likely

A fixed pocket, a moving reference frame.

POCKET

7 ♥ 5 ♠

BOARD IN REVEAL ORDER

6 ♠ 7 ♦ J ♣ A ♦ Q ♥

Follow this selected held likely journey against 1 active opponent. The board was chosen to illustrate the stated transition pattern, so it is a teaching example rather than an unbiased sample of how often that pattern occurs.

Street	Dynamic refs	Near ranks	Dynamic	Pocket	MC share
Preflop	7 5 T 4	9/13	LIKELY	LIKELY	39.8%
Flop	7 J 3 6	10/13	LIKELY	LIKELY	67.2%
Turn	J A T 5	10/13	LIKELY	LIKELY	61.4%
River	A Q J 4	9/13	LIKELY	LIKELY	53.9%

Read the changes separately

The dynamic label changes **0** times, while the pocket coverage stays anchored at 9/13. The sampled share moves from 39.8% before the flop to 53.9% on the river. Label changes and share changes are different measurements; one is not a numerical substitute for the other.

The final made category is **one pair**. This particular board improves the sampled comparison relative to the starting pocket. Each street uses 4,096 samples; intervals are in the receipt.

What could have happened instead?

Known street	Unseen next cards	Change dynamic label	Preserve label
Flop	47	4	43
Turn	46	11	35

Replay the discovery

Can you follow 0 dynamic label changes while the pocket frame stays anchored? **Yes.** Start with the hole cards, then use the last two revealed cards at each later street. Reconstruct the references and enjoy seeing the pattern emerge. Explore how each street connects with the made hand.

ZONE JOURNEYS

Journey 02 · held unlikely

A fixed pocket, a moving reference frame.

POCKET

3 ♦ 5 ♠

BOARD IN REVEAL ORDER

7 ♦ 3 ♣ A ♦ 3 ♠ 2 ♦

Follow this selected held unlikely journey against 5 active opponents. The board was chosen to illustrate the stated transition pattern, so it is a teaching example rather than an unbiased sample of how often that pattern occurs.

Street	Dynamic refs	Near ranks	Dynamic	Pocket	MC share
Preflop	3 5 6 4	6/13	UNLIKELY	UNLIKELY	11.3%
Flop	3 A 2 K	6/13	UNLIKELY	UNLIKELY	14.4%
Turn	A 3 2 K	6/13	UNLIKELY	UNLIKELY	73.4%
River	3 2	4/13	UNLIKELY	UNLIKELY	57.9%

Read the changes separately

The dynamic label changes **0** times, while the pocket coverage stays anchored at 6/13. The sampled share moves from 11.3% before the flop to 57.9% on the river. Label changes and share changes are different measurements; one is not a numerical substitute for the other.

The final made category is **three of a kind**. This particular board improves the sampled comparison relative to the starting pocket. Each street uses 4,096 samples; intervals are in the receipt.

What could have happened instead?

Known street	Unseen next cards	Change dynamic label	Preserve label
Flop	47	38	9
Turn	46	31	15

Replay the discovery

Can you follow 0 dynamic label changes while the pocket frame stays anchored? **Yes.** Start with the hole cards, then use the last two revealed cards at each later street. Reconstruct the references and enjoy seeing the pattern emerge. Explore how each street connects with the made hand.

ZONE JOURNEYS

Journey 03 · one change

A fixed pocket, a moving reference frame.

POCKET

8 ♦ 2 ♠

BOARD IN REVEAL ORDER

K ♦ A ♦ 3 ♥ K ♥ 9 ♦

Follow this selected one change journey against 8 active opponents. The board was chosen to illustrate the stated transition pattern, so it is a teaching example rather than an unbiased sample of how often that pattern occurs.

Street	Dynamic refs	Near ranks	Dynamic	Pocket	MC share
Preflop	8 2	6/13	UNLIKELY	UNLIKELY	6.0%
Flop	A 3 2 K	6/13	UNLIKELY	UNLIKELY	2.4%
Turn	3 K A Q	7/13	LIKELY	UNLIKELY	0.3%
River	K 9 7 6	9/13	LIKELY	UNLIKELY	0.0%

Read the changes separately

The dynamic label changes **1** time, while the pocket coverage stays anchored at 6/13. The sampled share moves from 6.0% before the flop to 0.0% on the river. Label changes and share changes are different measurements; one is not a numerical substitute for the other.

The final made category is **one pair**. This particular board does not improve the sampled comparison relative to the starting pocket. Each street uses 4,096 samples; intervals are in the receipt.

What could have happened instead?

Known street	Unseen next cards	Change dynamic label	Preserve label
Flop	47	30	17
Turn	46	3	43

Replay the discovery

Can you follow 1 dynamic label changes while the pocket frame stays anchored? **Yes.** Start with the hole cards, then use the last two revealed cards at each later street. Reconstruct the references and enjoy seeing the pattern emerge. Explore how each street connects with the made hand.

ZONE JOURNEYS

Journey 04 · two changes

A fixed pocket, a moving reference frame.

POCKET

A ♥ A ♦

BOARD IN REVEAL ORDER

T ♣ 5 ♠ A ♣ 9 ♦ 2 ♠

Follow this selected two changes journey against 1 active opponent. The board was chosen to illustrate the stated transition pattern, so it is a teaching example rather than an unbiased sample of how often that pattern occurs.

Street	Dynamic refs	Near ranks	Dynamic	Pocket	MC share
Preflop	A K 2	5/13	UNLIKELY	UNLIKELY	85.0%
Flop	5 A 4 J	10/13	LIKELY	UNLIKELY	93.7%
Turn	A 9 8 7	8/13	LIKELY	UNLIKELY	96.8%
River	9 2	6/13	UNLIKELY	UNLIKELY	98.7%

Read the changes separately

The dynamic label changes **2** times, while the pocket coverage stays anchored at 5/13. The sampled share moves from 85.0% before the flop to 98.7% on the river. Label changes and share changes are different measurements; one is not a numerical substitute for the other.

The final made category is **three of a kind**. This particular board improves the sampled comparison relative to the starting pocket. Each street uses 4,096 samples; intervals are in the receipt.

What could have happened instead?

Known street	Unseen next cards	Change dynamic label	Preserve label
Flop	47	9	38
Turn	46	4	42

Replay the discovery

Can you follow 2 dynamic label changes while the pocket frame stays anchored? **Yes.** Start with the hole cards, then use the last two revealed cards at each later street. Reconstruct the references and enjoy seeing the pattern emerge. Explore how each street connects with the made hand.

ZONE JOURNEYS

Journey 05 · three changes

A fixed pocket, a moving reference frame.

POCKET

5 ♣ 9 ♠

BOARD IN REVEAL ORDER

5 ♥ 2 ♠ 5 ♠ A ♦ 2 ♦

Follow this selected three changes journey against 5 active opponents. The board was chosen to illustrate the stated transition pattern, so it is a teaching example rather than an unbiased sample of how often that pattern occurs.

Street	Dynamic refs	Near ranks	Dynamic	Pocket	MC share
Preflop	5 9 Q 6	10/13	LIKELY	LIKELY	11.6%
Flop	2 5	6/13	UNLIKELY	LIKELY	69.4%
Turn	5 A 4 J	10/13	LIKELY	LIKELY	66.6%
River	A 2	4/13	UNLIKELY	LIKELY	86.0%

Read the changes separately

The dynamic label changes **3** times, while the pocket coverage stays anchored at 10/13. The sampled share moves from 11.6% before the flop to 86.0% on the river. Label changes and share changes are different measurements; one is not a numerical substitute for the other.

The final made category is **full house**. This particular board improves the sampled comparison relative to the starting pocket. Each street uses 4,096 samples; intervals are in the receipt.

What could have happened instead?

Known street	Unseen next cards	Change dynamic label	Preserve label
Flop	47	40	7
Turn	46	10	36

Replay the discovery

Can you follow 3 dynamic label changes while the pocket frame stays anchored? **Yes.** Start with the hole cards, then use the last two revealed cards at each later street. Reconstruct the references and enjoy seeing the pattern emerge. Explore how each street connects with the made hand.

ZONE JOURNEYS

Journey 06 · held likely

A fixed pocket, a moving reference frame.

POCKET

J ♦ Q ♦

BOARD IN REVEAL ORDER

6 ♣ 6 ♦ K ♥ 9 ♠ 9 ♥

Follow this selected held likely journey against 8 active opponents. The board was chosen to illustrate the stated transition pattern, so it is a teaching example rather than an unbiased sample of how often that pattern occurs.

Street	Dynamic refs	Near ranks	Dynamic	Pocket	MC share
Preflop	J Q 8 3	10/13	LIKELY	LIKELY	19.4%
Flop	6 K 4 9	11/13	LIKELY	LIKELY	6.8%
Turn	K 9 7 6	9/13	LIKELY	LIKELY	7.1%
River	9 3 2	7/13	LIKELY	LIKELY	0.0%

Read the changes separately

The dynamic label changes **0** times, while the pocket coverage stays anchored at 10/13. The sampled share moves from 19.4% before the flop to 0.0% on the river. Label changes and share changes are different measurements; one is not a numerical substitute for the other.

The final made category is **two pair**. This particular board does not improve the sampled comparison relative to the starting pocket. Each street uses 4,096 samples; intervals are in the receipt.

What could have happened instead?

Known street	Unseen next cards	Change dynamic label	Preserve label
Flop	47	4	43
Turn	46	4	42

Replay the discovery

Can you follow 0 dynamic label changes while the pocket frame stays anchored? **Yes.** Start with the hole cards, then use the last two revealed cards at each later street. Reconstruct the references and enjoy seeing the pattern emerge. Explore how each street connects with the made hand.

ZONE JOURNEYS

Journey 07 · held unlikely

A fixed pocket, a moving reference frame.

POCKET

3 ♥ A ♠

BOARD IN REVEAL ORDER

9 ♣ 2 ♣ K ♣ 2 ♥ 3 ♣

Follow this selected held unlikely journey against 1 active opponent. The board was chosen to illustrate the stated transition pattern, so it is a teaching example rather than an unbiased sample of how often that pattern occurs.

Street	Dynamic refs	Near ranks	Dynamic	Pocket	MC share
Preflop	3 A 2 K	6/13	UNLIKELY	UNLIKELY	56.0%
Flop	2 K	5/13	UNLIKELY	UNLIKELY	39.3%
Turn	K 2	5/13	UNLIKELY	UNLIKELY	44.5%
River	2 3	4/13	UNLIKELY	UNLIKELY	34.6%

Read the changes separately

The dynamic label changes **0** times, while the pocket coverage stays anchored at 6/13. The sampled share moves from 56.0% before the flop to 34.6% on the river. Label changes and share changes are different measurements; one is not a numerical substitute for the other.

The final made category is **two pair**. This particular board does not improve the sampled comparison relative to the starting pocket. Each street uses 4,096 samples; intervals are in the receipt.

What could have happened instead?

Known street	Unseen next cards	Change dynamic label	Preserve label
Flop	47	44	3
Turn	46	0	46

Replay the discovery

Can you follow 0 dynamic label changes while the pocket frame stays anchored? **Yes.** Start with the hole cards, then use the last two revealed cards at each later street. Reconstruct the references and enjoy seeing the pattern emerge. Explore how each street connects with the made hand.

ZONE JOURNEYS

Journey 08 · one change

A fixed pocket, a moving reference frame.

POCKET

5 ♥ 3 ♦

BOARD IN REVEAL ORDER

7 ♥ 6 ♠ J ♥ 8 ♥ T ♠

Follow this selected one change journey against 5 active opponents. The board was chosen to illustrate the stated transition pattern, so it is a teaching example rather than an unbiased sample of how often that pattern occurs.

Street	Dynamic refs	Near ranks	Dynamic	Pocket	MC share
Preflop	5 3 6 4	6/13	UNLIKELY	UNLIKELY	11.6%
Flop	6 J 2 7	10/13	LIKELY	UNLIKELY	13.3%
Turn	J 8 4 5	10/13	LIKELY	UNLIKELY	8.6%
River	8 T 3 4	9/13	LIKELY	UNLIKELY	0.0%

Read the changes separately

The dynamic label changes **1** time, while the pocket coverage stays anchored at 6/13. The sampled share moves from 11.6% before the flop to 0.0% on the river. Label changes and share changes are different measurements; one is not a numerical substitute for the other.

The final made category is **high card**. This particular board does not improve the sampled comparison relative to the starting pocket. Each street uses 4,096 samples; intervals are in the receipt.

What could have happened instead?

Known street	Unseen next cards	Change dynamic label	Preserve label
Flop	47	4	43
Turn	46	4	42

Replay the discovery

Can you follow 1 dynamic label changes while the pocket frame stays anchored? **Yes.** Start with the hole cards, then use the last two revealed cards at each later street. Reconstruct the references and enjoy seeing the pattern emerge. Explore how each street connects with the made hand.

ZONE JOURNEYS

Journey 09 · two changes

A fixed pocket, a moving reference frame.

POCKET

7 ♣ 7 ♥

BOARD IN REVEAL ORDER

A ♦ 2 ♣ K ♠ 6 ♠ 4 ♣

Follow this selected two changes journey against 8 active opponents. The board was chosen to illustrate the stated transition pattern, so it is a teaching example rather than an unbiased sample of how often that pattern occurs.

Street	Dynamic refs	Near ranks	Dynamic	Pocket	MC share
Preflop	7 Q 2	9/13	LIKELY	LIKELY	15.0%
Flop	2 K	5/13	UNLIKELY	LIKELY	8.1%
Turn	K 6 4 9	11/13	LIKELY	LIKELY	4.7%
River	6 4 8	7/13	LIKELY	LIKELY	2.4%

Read the changes separately

The dynamic label changes **2** times, while the pocket coverage stays anchored at 9/13. The sampled share moves from 15.0% before the flop to 2.4% on the river. Label changes and share changes are different measurements; one is not a numerical substitute for the other.

The final made category is **one pair**. This particular board does not improve the sampled comparison relative to the starting pocket. Each street uses 4,096 samples; intervals are in the receipt.

What could have happened instead?

Known street	Unseen next cards	Change dynamic label	Preserve label
Flop	47	44	3
Turn	46	3	43

Replay the discovery

Can you follow 2 dynamic label changes while the pocket frame stays anchored? **Yes.** Start with the hole cards, then use the last two revealed cards at each later street. Reconstruct the references and enjoy seeing the pattern emerge. Explore how each street connects with the made hand.

ZONE JOURNEYS

Journey 10 · three changes

A fixed pocket, a moving reference frame.

POCKET

A ♥ 5 ♦

BOARD IN REVEAL ORDER

T ♥ 3 ♦ A ♠ 5 ♠ 3 ♣

Follow this selected three changes journey against 1 active opponent. The board was chosen to illustrate the stated transition pattern, so it is a teaching example rather than an unbiased sample of how often that pattern occurs.

Street	Dynamic refs	Near ranks	Dynamic	Pocket	MC share
Preflop	A 5 4 J	10/13	LIKELY	LIKELY	57.5%
Flop	3 A 2 K	6/13	UNLIKELY	LIKELY	84.0%
Turn	A 5 4 J	10/13	LIKELY	LIKELY	90.7%
River	5 3 6 4	6/13	UNLIKELY	LIKELY	88.4%

Read the changes separately

The dynamic label changes **3** times, while the pocket coverage stays anchored at 10/13. The sampled share moves from 57.5% before the flop to 88.4% on the river. Label changes and share changes are different measurements; one is not a numerical substitute for the other.

The final made category is **two pair**. This particular board improves the sampled comparison relative to the starting pocket. Each street uses 4,096 samples; intervals are in the receipt.

What could have happened instead?

Known street	Unseen next cards	Change dynamic label	Preserve label
Flop	47	38	9
Turn	46	7	39

Replay the discovery

Can you follow 3 dynamic label changes while the pocket frame stays anchored? **Yes.** Start with the hole cards, then use the last two revealed cards at each later street. Reconstruct the references and enjoy seeing the pattern emerge. Explore how each street connects with the made hand.

ZONE JOURNEYS

Journey 11 · held likely

A fixed pocket, a moving reference frame.

POCKET

6 ♦ 4 ♥

BOARD IN REVEAL ORDER

T ♣ A ♥ J ♠ 7 ♠ 4 ♣

Follow this selected held likely journey against 5 active opponents. The board was chosen to illustrate the stated transition pattern, so it is a teaching example rather than an unbiased sample of how often that pattern occurs.

Street	Dynamic refs	Near ranks	Dynamic	Pocket	MC share
Preflop	6 4 8	7/13	LIKELY	LIKELY	13.6%
Flop	A J T 5	10/13	LIKELY	LIKELY	1.8%
Turn	J 7 3 6	10/13	LIKELY	LIKELY	0.2%
River	7 4 9 5	8/13	LIKELY	LIKELY	1.3%

Read the changes separately

The dynamic label changes **0** times, while the pocket coverage stays anchored at 7/13. The sampled share moves from 13.6% before the flop to 1.3% on the river. Label changes and share changes are different measurements; one is not a numerical substitute for the other.

The final made category is **one pair**. This particular board does not improve the sampled comparison relative to the starting pocket. Each street uses 4,096 samples; intervals are in the receipt.

What could have happened instead?

Known street	Unseen next cards	Change dynamic label	Preserve label
Flop	47	4	43
Turn	46	4	42

Replay the discovery

Can you follow 0 dynamic label changes while the pocket frame stays anchored? **Yes.** Start with the hole cards, then use the last two revealed cards at each later street. Reconstruct the references and enjoy seeing the pattern emerge. Explore how each street connects with the made hand.

ZONE JOURNEYS

Journey 12 · held unlikely

A fixed pocket, a moving reference frame.

POCKET

4 ♣ 3 ♠

BOARD IN REVEAL ORDER

4 ♥ 3 ♦ 2 ♥ 3 ♥ 2 ♦

Follow this selected held unlikely journey against 8 active opponents. The board was chosen to illustrate the stated transition pattern, so it is a teaching example rather than an unbiased sample of how often that pattern occurs.

Street	Dynamic refs	Near ranks	Dynamic	Pocket	MC share
Preflop	4 3 5	5/13	UNLIKELY	UNLIKELY	6.8%
Flop	3 2	4/13	UNLIKELY	UNLIKELY	28.3%
Turn	2 3	4/13	UNLIKELY	UNLIKELY	90.2%
River	3 2	4/13	UNLIKELY	UNLIKELY	96.1%

Read the changes separately

The dynamic label changes **0** times, while the pocket coverage stays anchored at 5/13. The sampled share moves from 6.8% before the flop to 96.1% on the river. Label changes and share changes are different measurements; one is not a numerical substitute for the other.

The final made category is **full house**. This particular board improves the sampled comparison relative to the starting pocket. Each street uses 4,096 samples; intervals are in the receipt.

What could have happened instead?

Known street	Unseen next cards	Change dynamic label	Preserve label
Flop	47	0	47
Turn	46	32	14

Replay the discovery

Can you follow 0 dynamic label changes while the pocket frame stays anchored? **Yes.** Start with the hole cards, then use the last two revealed cards at each later street. Reconstruct the references and enjoy seeing the pattern emerge. Explore how each street connects with the made hand.

ZONE JOURNEYS

Journey 13 · one change

A fixed pocket, a moving reference frame.

POCKET

Q ♥ 3 ♠

BOARD IN REVEAL ORDER

7 ♠ 6 ♣ Q ♠ 2 ♥ 9 ♠

Follow this selected one change journey against 1 active opponent. The board was chosen to illustrate the stated transition pattern, so it is a teaching example rather than an unbiased sample of how often that pattern occurs.

Street	Dynamic refs	Near ranks	Dynamic	Pocket	MC share
Preflop	Q 3 K J	8/13	LIKELY	LIKELY	48.4%
Flop	6 Q 3 8	11/13	LIKELY	LIKELY	77.9%
Turn	Q 2	6/13	UNLIKELY	LIKELY	81.8%
River	2 9	6/13	UNLIKELY	LIKELY	77.9%

Read the changes separately

The dynamic label changes **1** time, while the pocket coverage stays anchored at 8/13. The sampled share moves from 48.4% before the flop to 77.9% on the river. Label changes and share changes are different measurements; one is not a numerical substitute for the other.

The final made category is **one pair**. This particular board improves the sampled comparison relative to the starting pocket. Each street uses 4,096 samples; intervals are in the receipt.

What could have happened instead?

Known street	Unseen next cards	Change dynamic label	Preserve label
Flop	47	4	43
Turn	46	0	46

Replay the discovery

Can you follow 1 dynamic label changes while the pocket frame stays anchored? **Yes.** Start with the hole cards, then use the last two revealed cards at each later street. Reconstruct the references and enjoy seeing the pattern emerge. Explore how each street connects with the made hand.

ZONE JOURNEYS

Journey 14 · two changes

A fixed pocket, a moving reference frame.

POCKET

K ♣ 3 ♣

BOARD IN REVEAL ORDER

J ♠ Q ♥ 2 ♠ A ♠ Q ♣

Follow this selected two changes journey against 5 active opponents. The board was chosen to illustrate the stated transition pattern, so it is a teaching example rather than an unbiased sample of how often that pattern occurs.

Street	Dynamic refs	Near ranks	Dynamic	Pocket	MC share
Preflop	K 3 A Q	7/13	LIKELY	LIKELY	18.6%
Flop	Q 2	6/13	UNLIKELY	LIKELY	5.6%
Turn	2 A	4/13	UNLIKELY	LIKELY	4.6%
River	A Q J 4	9/13	LIKELY	LIKELY	1.1%

Read the changes separately

The dynamic label changes **2** times, while the pocket coverage stays anchored at 7/13. The sampled share moves from 18.6% before the flop to 1.1% on the river. Label changes and share changes are different measurements; one is not a numerical substitute for the other.

The final made category is **one pair**. This particular board does not improve the sampled comparison relative to the starting pocket. Each street uses 4,096 samples; intervals are in the receipt.

What could have happened instead?

Known street	Unseen next cards	Change dynamic label	Preserve label
Flop	47	0	47
Turn	46	37	9

Replay the discovery

Can you follow 2 dynamic label changes while the pocket frame stays anchored? **Yes.** Start with the hole cards, then use the last two revealed cards at each later street. Reconstruct the references and enjoy seeing the pattern emerge. Explore how each street connects with the made hand.

ZONE JOURNEYS

Journey 15 · three changes

A fixed pocket, a moving reference frame.

POCKET

A ♦ 3 ♣

BOARD IN REVEAL ORDER

6 ♦ K ♣ 4 ♥ 3 ♦ T ♣

Follow this selected three changes journey against 8 active opponents. The board was chosen to illustrate the stated transition pattern, so it is a teaching example rather than an unbiased sample of how often that pattern occurs.

Street	Dynamic refs	Near ranks	Dynamic	Pocket	MC share
Preflop	A 3 2 K	6/13	UNLIKELY	UNLIKELY	10.6%
Flop	K 4 2 J	9/13	LIKELY	UNLIKELY	3.5%
Turn	4 3 5	5/13	UNLIKELY	UNLIKELY	6.2%
River	3 T J 9	8/13	LIKELY	UNLIKELY	0.0%

Read the changes separately

The dynamic label changes **3** times, while the pocket coverage stays anchored at 6/13. The sampled share moves from 10.6% before the flop to 0.0% on the river. Label changes and share changes are different measurements; one is not a numerical substitute for the other.

The final made category is **one pair**. This particular board does not improve the sampled comparison relative to the starting pocket. Each street uses 4,096 samples; intervals are in the receipt.

What could have happened instead?

Known street	Unseen next cards	Change dynamic label	Preserve label
Flop	47	7	40
Turn	46	30	16

Replay the discovery

Can you follow 3 dynamic label changes while the pocket frame stays anchored? **Yes.** Start with the hole cards, then use the last two revealed cards at each later street. Reconstruct the references and enjoy seeing the pattern emerge. Explore how each street connects with the made hand.

ZONE JOURNEYS

Journey 16 · held likely

A fixed pocket, a moving reference frame.

POCKET

4 ♠ 7 ♥

BOARD IN REVEAL ORDER

7 ♦ 4 ♥ 9 ♥ A ♥ Q ♠

Follow this selected held likely journey against 1 active opponent. The board was chosen to illustrate the stated transition pattern, so it is a teaching example rather than an unbiased sample of how often that pattern occurs.

Street	Dynamic refs	Near ranks	Dynamic	Pocket	MC share
Preflop	4 7 9 5	8/13	LIKELY	LIKELY	38.7%
Flop	4 9 J 7	10/13	LIKELY	LIKELY	83.9%
Turn	9 A 8 7	8/13	LIKELY	LIKELY	84.3%
River	A Q J 4	9/13	LIKELY	LIKELY	89.6%

Read the changes separately

The dynamic label changes **0** times, while the pocket coverage stays anchored at 8/13. The sampled share moves from 38.7% before the flop to 89.6% on the river. Label changes and share changes are different measurements; one is not a numerical substitute for the other.

The final made category is **two pair**. This particular board improves the sampled comparison relative to the starting pocket. Each street uses 4,096 samples; intervals are in the receipt.

What could have happened instead?

Known street	Unseen next cards	Change dynamic label	Preserve label
Flop	47	4	43
Turn	46	11	35

Replay the discovery

Can you follow 0 dynamic label changes while the pocket frame stays anchored? **Yes.** Start with the hole cards, then use the last two revealed cards at each later street. Reconstruct the references and enjoy seeing the pattern emerge. Explore how each street connects with the made hand.

ZONE JOURNEYS

Journey 17 · held unlikely

A fixed pocket, a moving reference frame.

POCKET

K ♠ 2 ♥

BOARD IN REVEAL ORDER

K ♣ 5 ♣ 3 ♥ A ♦ 3 ♣

Follow this selected held unlikely journey against 5 active opponents. The board was chosen to illustrate the stated transition pattern, so it is a teaching example rather than an unbiased sample of how often that pattern occurs.

Street	Dynamic refs	Near ranks	Dynamic	Pocket	MC share
Preflop	K 2	5/13	UNLIKELY	UNLIKELY	14.2%
Flop	5 3 6 4	6/13	UNLIKELY	UNLIKELY	32.9%
Turn	3 A 2 K	6/13	UNLIKELY	UNLIKELY	25.2%
River	A 3 2 K	6/13	UNLIKELY	UNLIKELY	14.2%

Read the changes separately

The dynamic label changes **0** times, while the pocket coverage stays anchored at 5/13. The sampled share moves from 14.2% before the flop to 14.2% on the river. Label changes and share changes are different measurements; one is not a numerical substitute for the other.

The final made category is **two pair**. This particular board does not improve the sampled comparison relative to the starting pocket. Each street uses 4,096 samples; intervals are in the receipt.

What could have happened instead?

Known street	Unseen next cards	Change dynamic label	Preserve label
Flop	47	30	17
Turn	46	37	9

Replay the discovery

Can you follow 0 dynamic label changes while the pocket frame stays anchored? **Yes.** Start with the hole cards, then use the last two revealed cards at each later street. Reconstruct the references and enjoy seeing the pattern emerge. Explore how each street connects with the made hand.

ZONE JOURNEYS

Journey 18 · one change

A fixed pocket, a moving reference frame.

POCKET

A ♣ 4 ♦

BOARD IN REVEAL ORDER

3 ♠ T ♠ 9 ♦ 2 ♣ T ♥

Follow this selected one change journey against 8 active opponents. The board was chosen to illustrate the stated transition pattern, so it is a teaching example rather than an unbiased sample of how often that pattern occurs.

Street	Dynamic refs	Near ranks	Dynamic	Pocket	MC share
Preflop	A 4 3 Q	8/13	LIKELY	LIKELY	10.9%
Flop	T 9 4 3	8/13	LIKELY	LIKELY	3.8%
Turn	9 2	6/13	UNLIKELY	LIKELY	8.7%
River	2 T	6/13	UNLIKELY	LIKELY	0.0%

Read the changes separately

The dynamic label changes **1** time, while the pocket coverage stays anchored at 8/13. The sampled share moves from 10.9% before the flop to 0.0% on the river. Label changes and share changes are different measurements; one is not a numerical substitute for the other.

The final made category is **one pair**. This particular board does not improve the sampled comparison relative to the starting pocket. Each street uses 4,096 samples; intervals are in the receipt.

What could have happened instead?

Known street	Unseen next cards	Change dynamic label	Preserve label
Flop	47	4	43
Turn	46	0	46

Replay the discovery

Can you follow 1 dynamic label changes while the pocket frame stays anchored? **Yes.** Start with the hole cards, then use the last two revealed cards at each later street. Reconstruct the references and enjoy seeing the pattern emerge. Explore how each street connects with the made hand.

ZONE JOURNEYS

Journey 19 · two changes

A fixed pocket, a moving reference frame.

POCKET

7 ♣ 9 ♠

BOARD IN REVEAL ORDER

J ♣ K ♣ 2 ♥ J ♦ 6 ♣

Follow this selected two changes journey against 1 active opponent. The board was chosen to illustrate the stated transition pattern, so it is a teaching example rather than an unbiased sample of how often that pattern occurs.

Street	Dynamic refs	Near ranks	Dynamic	Pocket	MC share
Preflop	7 9 A 4	11/13	LIKELY	LIKELY	45.8%
Flop	K 2	5/13	UNLIKELY	LIKELY	31.1%
Turn	2 J	6/13	UNLIKELY	LIKELY	28.3%
River	J 6 2 7	10/13	LIKELY	LIKELY	16.6%

Read the changes separately

The dynamic label changes **2** times, while the pocket coverage stays anchored at 11/13. The sampled share moves from 45.8% before the flop to 16.6% on the river. Label changes and share changes are different measurements; one is not a numerical substitute for the other.

The final made category is **one pair**. This particular board does not improve the sampled comparison relative to the starting pocket. Each street uses 4,096 samples; intervals are in the receipt.

What could have happened instead?

Known street	Unseen next cards	Change dynamic label	Preserve label
Flop	47	0	47
Turn	46	43	3

Replay the discovery

Can you follow 2 dynamic label changes while the pocket frame stays anchored? **Yes.** Start with the hole cards, then use the last two revealed cards at each later street. Reconstruct the references and enjoy seeing the pattern emerge. Explore how each street connects with the made hand.

ZONE JOURNEYS

Journey 20 · three changes

A fixed pocket, a moving reference frame.

POCKET

J ♣ Q ♥

BOARD IN REVEAL ORDER

8 ♠ 2 ♥ 6 ♠ 3 ♦ 3 ♥

Follow this selected three changes journey against 5 active opponents. The board was chosen to illustrate the stated transition pattern, so it is a teaching example rather than an unbiased sample of how often that pattern occurs.

Street	Dynamic refs	Near ranks	Dynamic	Pocket	MC share
Preflop	J Q 8 3	10/13	LIKELY	LIKELY	22.2%
Flop	2 6	6/13	UNLIKELY	LIKELY	10.0%
Turn	6 3 7 5	7/13	LIKELY	LIKELY	5.0%
River	3 4 2	5/13	UNLIKELY	LIKELY	0.1%

Read the changes separately

The dynamic label changes **3** times, while the pocket coverage stays anchored at 10/13. The sampled share moves from 22.2% before the flop to 0.1% on the river. Label changes and share changes are different measurements; one is not a numerical substitute for the other.

The final made category is **one pair**. This particular board does not improve the sampled comparison relative to the starting pocket. Each street uses 4,096 samples; intervals are in the receipt.

What could have happened instead?

Known street	Unseen next cards	Change dynamic label	Preserve label
Flop	47	44	3
Turn	46	18	28

Replay the discovery

Can you follow 3 dynamic label changes while the pocket frame stays anchored? **Yes.** Start with the hole cards, then use the last two revealed cards at each later street. Reconstruct the references and enjoy seeing the pattern emerge. Explore how each street connects with the made hand.

ZONE JOURNEYS

Journey 21 · held likely

A fixed pocket, a moving reference frame.

POCKET

3 ♣ K ♥

BOARD IN REVEAL ORDER

8 ♠ K ♦ 7 ♠ 9 ♥ 5 ♣

Follow this selected held likely journey against 8 active opponents. The board was chosen to illustrate the stated transition pattern, so it is a teaching example rather than an unbiased sample of how often that pattern occurs.

Street	Dynamic refs	Near ranks	Dynamic	Pocket	MC share
Preflop	3 K A Q	7/13	LIKELY	LIKELY	9.5%
Flop	K 7 5 8	9/13	LIKELY	LIKELY	18.0%
Turn	7 9 A 4	11/13	LIKELY	LIKELY	11.9%
River	9 5 Q 6	10/13	LIKELY	LIKELY	2.5%

Read the changes separately

The dynamic label changes **0** times, while the pocket coverage stays anchored at 7/13. The sampled share moves from 9.5% before the flop to 2.5% on the river. Label changes and share changes are different measurements; one is not a numerical substitute for the other.

The final made category is **one pair**. This particular board does not improve the sampled comparison relative to the starting pocket. Each street uses 4,096 samples; intervals are in the receipt.

What could have happened instead?

Known street	Unseen next cards	Change dynamic label	Preserve label
Flop	47	4	43
Turn	46	4	42

Replay the discovery

Can you follow 0 dynamic label changes while the pocket frame stays anchored? **Yes.** Start with the hole cards, then use the last two revealed cards at each later street. Reconstruct the references and enjoy seeing the pattern emerge. Explore how each street connects with the made hand.

ZONE JOURNEYS

Journey 22 · held unlikely

A fixed pocket, a moving reference frame.

POCKET

5 ♦ 3 ♣

BOARD IN REVEAL ORDER

A ♣ Q ♠ 2 ♦ 2 ♣ J ♥

Follow this selected held unlikely journey against 1 active opponent. The board was chosen to illustrate the stated transition pattern, so it is a teaching example rather than an unbiased sample of how often that pattern occurs.

Street	Dynamic refs	Near ranks	Dynamic	Pocket	MC share
Preflop	5 3 6 4	6/13	UNLIKELY	UNLIKELY	36.7%
Flop	Q 2	6/13	UNLIKELY	UNLIKELY	29.8%
Turn	2	3/13	UNLIKELY	UNLIKELY	28.6%
River	2 J	6/13	UNLIKELY	UNLIKELY	19.7%

Read the changes separately

The dynamic label changes **0** times, while the pocket coverage stays anchored at 6/13. The sampled share moves from 36.7% before the flop to 19.7% on the river. Label changes and share changes are different measurements; one is not a numerical substitute for the other.

The final made category is **one pair**. This particular board does not improve the sampled comparison relative to the starting pocket. Each street uses 4,096 samples; intervals are in the receipt.

What could have happened instead?

Known street	Unseen next cards	Change dynamic label	Preserve label
Flop	47	0	47
Turn	46	0	46

Replay the discovery

Can you follow 0 dynamic label changes while the pocket frame stays anchored? **Yes.** Start with the hole cards, then use the last two revealed cards at each later street. Reconstruct the references and enjoy seeing the pattern emerge. Explore how each street connects with the made hand.

ZONE JOURNEYS

Journey 23 · one change

A fixed pocket, a moving reference frame.

POCKET

K ♥ 8 ♣

BOARD IN REVEAL ORDER

4 ♠ 9 ♥ 8 ♥ A ♥ 2 ♦

Follow this selected one change journey against 5 active opponents. The board was chosen to illustrate the stated transition pattern, so it is a teaching example rather than an unbiased sample of how often that pattern occurs.

Street	Dynamic refs	Near ranks	Dynamic	Pocket	MC share
Preflop	K 8 6 7	8/13	LIKELY	LIKELY	17.0%
Flop	9 8 2 3	8/13	LIKELY	LIKELY	27.6%
Turn	8 A 7	7/13	LIKELY	LIKELY	33.4%
River	A 2	4/13	UNLIKELY	LIKELY	9.6%

Read the changes separately

The dynamic label changes **1** time, while the pocket coverage stays anchored at 8/13. The sampled share moves from 17.0% before the flop to 9.6% on the river. Label changes and share changes are different measurements; one is not a numerical substitute for the other.

The final made category is **one pair**. This particular board does not improve the sampled comparison relative to the starting pocket. Each street uses 4,096 samples; intervals are in the receipt.

What could have happened instead?

Known street	Unseen next cards	Change dynamic label	Preserve label
Flop	47	4	43
Turn	46	11	35

Replay the discovery

Can you follow 1 dynamic label changes while the pocket frame stays anchored? **Yes.** Start with the hole cards, then use the last two revealed cards at each later street. Reconstruct the references and enjoy seeing the pattern emerge. Explore how each street connects with the made hand.

ZONE JOURNEYS

Journey 24 · two changes

A fixed pocket, a moving reference frame.

POCKET

Q ♠ 8 ♣

BOARD IN REVEAL ORDER

3 ♥ 8 ♥ 2 ♣ 6 ♥ K ♦

Follow this selected two changes journey against 8 active opponents. The board was chosen to illustrate the stated transition pattern, so it is a teaching example rather than an unbiased sample of how often that pattern occurs.

Street	Dynamic refs	Near ranks	Dynamic	Pocket	MC share
Preflop	Q 8 5 6	9/13	LIKELY	LIKELY	11.0%
Flop	8 2	6/13	UNLIKELY	LIKELY	18.4%
Turn	2 6	6/13	UNLIKELY	LIKELY	9.5%
River	6 K 4 9	11/13	LIKELY	LIKELY	5.2%

Read the changes separately

The dynamic label changes **2** times, while the pocket coverage stays anchored at 9/13. The sampled share moves from 11.0% before the flop to 5.2% on the river. Label changes and share changes are different measurements; one is not a numerical substitute for the other.

The final made category is **one pair**. This particular board does not improve the sampled comparison relative to the starting pocket. Each street uses 4,096 samples; intervals are in the receipt.

What could have happened instead?

Known street	Unseen next cards	Change dynamic label	Preserve label
Flop	47	0	47
Turn	46	43	3

Replay the discovery

Can you follow 2 dynamic label changes while the pocket frame stays anchored? **Yes.** Start with the hole cards, then use the last two revealed cards at each later street. Reconstruct the references and enjoy seeing the pattern emerge. Explore how each street connects with the made hand.

ZONE JOURNEYS

Journey 25 · three changes

A fixed pocket, a moving reference frame.

POCKET

5 ♣ T ♠

BOARD IN REVEAL ORDER

A ♥ 2 ♠ 8 ♥ 3 ♥ 5 ♥

Follow this selected three changes journey against 1 active opponent. The board was chosen to illustrate the stated transition pattern, so it is a teaching example rather than an unbiased sample of how often that pattern occurs.

Street	Dynamic refs	Near ranks	Dynamic	Pocket	MC share
Preflop	5 T K 7	11/13	LIKELY	LIKELY	44.9%
Flop	2 8	6/13	UNLIKELY	LIKELY	29.7%
Turn	8 3 9 7	8/13	LIKELY	LIKELY	23.1%
River	3 5 6 4	6/13	UNLIKELY	LIKELY	29.2%

Read the changes separately

The dynamic label changes **3** times, while the pocket coverage stays anchored at 11/13. The sampled share moves from 44.9% before the flop to 29.2% on the river. Label changes and share changes are different measurements; one is not a numerical substitute for the other.

The final made category is **one pair**. This particular board does not improve the sampled comparison relative to the starting pocket. Each street uses 4,096 samples; intervals are in the receipt.

What could have happened instead?

Known street	Unseen next cards	Change dynamic label	Preserve label
Flop	47	44	3
Turn	46	16	30

Replay the discovery

Can you follow 3 dynamic label changes while the pocket frame stays anchored? **Yes.** Start with the hole cards, then use the last two revealed cards at each later street. Reconstruct the references and enjoy seeing the pattern emerge. Explore how each street connects with the made hand.

ZONE JOURNEYS

Journey 26 · held likely

A fixed pocket, a moving reference frame.

POCKET

4 ♠ 8 ♠

BOARD IN REVEAL ORDER

K ♥ 4 ♣ 4 ♥ A ♠ J ♠

Follow this selected held likely journey against 5 active opponents. The board was chosen to illustrate the stated transition pattern, so it is a teaching example rather than an unbiased sample of how often that pattern occurs.

Street	Dynamic refs	Near ranks	Dynamic	Pocket	MC share
Preflop	4 8 T 6	9/13	LIKELY	LIKELY	14.3%
Flop	4 6 2	7/13	LIKELY	LIKELY	68.1%
Turn	4 A 3 Q	8/13	LIKELY	LIKELY	73.4%
River	A J T 5	10/13	LIKELY	LIKELY	76.2%

Read the changes separately

The dynamic label changes **0** times, while the pocket coverage stays anchored at 9/13. The sampled share moves from 14.3% before the flop to 76.2% on the river. Label changes and share changes are different measurements; one is not a numerical substitute for the other.

The final made category is **three of a kind**. This particular board improves the sampled comparison relative to the starting pocket. Each street uses 4,096 samples; intervals are in the receipt.

What could have happened instead?

Known street	Unseen next cards	Change dynamic label	Preserve label
Flop	47	8	39
Turn	46	11	35

Replay the discovery

Can you follow 0 dynamic label changes while the pocket frame stays anchored? **Yes.** Start with the hole cards, then use the last two revealed cards at each later street. Reconstruct the references and enjoy seeing the pattern emerge. Explore how each street connects with the made hand.

ZONE JOURNEYS

Journey 27 · held unlikely

A fixed pocket, a moving reference frame.

POCKET

4 ♠ 2 ♣

BOARD IN REVEAL ORDER

9 ♥ A ♠ 2 ♠ 3 ♠ 3 ♦

Follow this selected held unlikely journey against 8 active opponents. The board was chosen to illustrate the stated transition pattern, so it is a teaching example rather than an unbiased sample of how often that pattern occurs.

Street	Dynamic refs	Near ranks	Dynamic	Pocket	MC share
Preflop	4 2	5/13	UNLIKELY	UNLIKELY	6.1%
Flop	A 2	4/13	UNLIKELY	UNLIKELY	10.3%
Turn	2 3	4/13	UNLIKELY	UNLIKELY	7.3%
River	3 4 2	5/13	UNLIKELY	UNLIKELY	0.4%

Read the changes separately

The dynamic label changes **0** times, while the pocket coverage stays anchored at 5/13. The sampled share moves from 6.1% before the flop to 0.4% on the river. Label changes and share changes are different measurements; one is not a numerical substitute for the other.

The final made category is **two pair**. This particular board does not improve the sampled comparison relative to the starting pocket. Each street uses 4,096 samples; intervals are in the receipt.

What could have happened instead?

Known street	Unseen next cards	Change dynamic label	Preserve label
Flop	47	0	47
Turn	46	31	15

Replay the discovery

Can you follow 0 dynamic label changes while the pocket frame stays anchored? **Yes.** Start with the hole cards, then use the last two revealed cards at each later street. Reconstruct the references and enjoy seeing the pattern emerge. Explore how each street connects with the made hand.

ZONE JOURNEYS

Journey 28 · one change

A fixed pocket, a moving reference frame.

POCKET

J ♦ 2 ♣

BOARD IN REVEAL ORDER

K ♥ 7 ♠ A ♥ 7 ♦ 7 ♥

Follow this selected one change journey against 1 active opponent. The board was chosen to illustrate the stated transition pattern, so it is a teaching example rather than an unbiased sample of how often that pattern occurs.

Street	Dynamic refs	Near ranks	Dynamic	Pocket	MC share
Preflop	J 2	6/13	UNLIKELY	UNLIKELY	43.4%
Flop	7 A 6 9	9/13	LIKELY	UNLIKELY	36.1%
Turn	A 7 6 9	9/13	LIKELY	UNLIKELY	36.7%
River	7 Q 2	9/13	LIKELY	UNLIKELY	30.1%

Read the changes separately

The dynamic label changes **1** time, while the pocket coverage stays anchored at 6/13. The sampled share moves from 43.4% before the flop to 30.1% on the river. Label changes and share changes are different measurements; one is not a numerical substitute for the other.

The final made category is **three of a kind**. This particular board does not improve the sampled comparison relative to the starting pocket. Each street uses 4,096 samples; intervals are in the receipt.

What could have happened instead?

Known street	Unseen next cards	Change dynamic label	Preserve label
Flop	47	10	37
Turn	46	3	43

Replay the discovery

Can you follow 1 dynamic label changes while the pocket frame stays anchored? **Yes.** Start with the hole cards, then use the last two revealed cards at each later street. Reconstruct the references and enjoy seeing the pattern emerge. Explore how each street connects with the made hand.

ZONE JOURNEYS

Journey 29 · two changes

A fixed pocket, a moving reference frame.

POCKET

K ♣ 9 ♦

BOARD IN REVEAL ORDER

7 ♦ J ♥ 2 ♦ A ♠ 8 ♣

Follow this selected two changes journey against 5 active opponents. The board was chosen to illustrate the stated transition pattern, so it is a teaching example rather than an unbiased sample of how often that pattern occurs.

Street	Dynamic refs	Near ranks	Dynamic	Pocket	MC share
Preflop	K 9 7 6	9/13	LIKELY	LIKELY	19.4%
Flop	J 2	6/13	UNLIKELY	LIKELY	10.3%
Turn	2 A	4/13	UNLIKELY	LIKELY	3.2%
River	A 8 7	7/13	LIKELY	LIKELY	0.3%

Read the changes separately

The dynamic label changes **2** times, while the pocket coverage stays anchored at 9/13. The sampled share moves from 19.4% before the flop to 0.3% on the river. Label changes and share changes are different measurements; one is not a numerical substitute for the other.

The final made category is **high card**. This particular board does not improve the sampled comparison relative to the starting pocket. Each street uses 4,096 samples; intervals are in the receipt.

What could have happened instead?

Known street	Unseen next cards	Change dynamic label	Preserve label
Flop	47	0	47
Turn	46	36	10

Replay the discovery

Can you follow 2 dynamic label changes while the pocket frame stays anchored? **Yes.** Start with the hole cards, then use the last two revealed cards at each later street. Reconstruct the references and enjoy seeing the pattern emerge. Explore how each street connects with the made hand.

ZONE JOURNEYS

Journey 30 · three changes

A fixed pocket, a moving reference frame.

POCKET

6 ♦ 2 ♦

BOARD IN REVEAL ORDER

Q ♣ 7 ♠ 4 ♥ 3 ♠ K ♥

Follow this selected three changes journey against 8 active opponents. The board was chosen to illustrate the stated transition pattern, so it is a teaching example rather than an unbiased sample of how often that pattern occurs.

Street	Dynamic refs	Near ranks	Dynamic	Pocket	MC share
Preflop	6 2	6/13	UNLIKELY	UNLIKELY	9.9%
Flop	7 4 9 5	8/13	LIKELY	UNLIKELY	2.5%
Turn	4 3 5	5/13	UNLIKELY	UNLIKELY	4.2%
River	3 K A Q	7/13	LIKELY	UNLIKELY	0.0%

Read the changes separately

The dynamic label changes **3** times, while the pocket coverage stays anchored at 6/13. The sampled share moves from 9.9% before the flop to 0.0% on the river. Label changes and share changes are different measurements; one is not a numerical substitute for the other.

The final made category is **high card**. This particular board does not improve the sampled comparison relative to the starting pocket. Each street uses 4,096 samples; intervals are in the receipt.

What could have happened instead?

Known street	Unseen next cards	Change dynamic label	Preserve label
Flop	47	7	40
Turn	46	29	17

Replay the discovery

Can you follow 3 dynamic label changes while the pocket frame stays anchored? **Yes.** Start with the hole cards, then use the last two revealed cards at each later street. Reconstruct the references and enjoy seeing the pattern emerge. Explore how each street connects with the made hand.

ZONE JOURNEYS

Journey 31 · held likely

A fixed pocket, a moving reference frame.

POCKET

K ♦ 6 ♥

BOARD IN REVEAL ORDER

7 ♦ A ♥ 5 ♣ 4 ♣ K ♠

Follow this selected held likely journey against 1 active opponent. The board was chosen to illustrate the stated transition pattern, so it is a teaching example rather than an unbiased sample of how often that pattern occurs.

Street	Dynamic refs	Near ranks	Dynamic	Pocket	MC share
Preflop	K 6 4 9	11/13	LIKELY	LIKELY	54.3%
Flop	A 5 4 J	10/13	LIKELY	LIKELY	46.6%
Turn	5 4 7 3	7/13	LIKELY	LIKELY	45.8%
River	4 K 2 J	9/13	LIKELY	LIKELY	72.8%

Read the changes separately

The dynamic label changes **0** times, while the pocket coverage stays anchored at 11/13. The sampled share moves from 54.3% before the flop to 72.8% on the river. Label changes and share changes are different measurements; one is not a numerical substitute for the other.

The final made category is **one pair**. This particular board improves the sampled comparison relative to the starting pocket. Each street uses 4,096 samples; intervals are in the receipt.

What could have happened instead?

Known street	Unseen next cards	Change dynamic label	Preserve label
Flop	47	8	39
Turn	46	8	38

Replay the discovery

Can you follow 0 dynamic label changes while the pocket frame stays anchored? **Yes.** Start with the hole cards, then use the last two revealed cards at each later street. Reconstruct the references and enjoy seeing the pattern emerge. Explore how each street connects with the made hand.

ZONE JOURNEYS

Journey 32 · held unlikely

A fixed pocket, a moving reference frame.

POCKET

3 ♦ 3 ♥

BOARD IN REVEAL ORDER

4 ♣ 4 ♦ 2 ♠ 4 ♠ 3 ♠

Follow this selected held unlikely journey against 5 active opponents. The board was chosen to illustrate the stated transition pattern, so it is a teaching example rather than an unbiased sample of how often that pattern occurs.

Street	Dynamic refs	Near ranks	Dynamic	Pocket	MC share
Preflop	3 4 2	5/13	UNLIKELY	UNLIKELY	16.3%
Flop	4 2	5/13	UNLIKELY	UNLIKELY	16.6%
Turn	2 4	5/13	UNLIKELY	UNLIKELY	28.2%
River	4 3 5	5/13	UNLIKELY	UNLIKELY	48.7%

Read the changes separately

The dynamic label changes **0** times, while the pocket coverage stays anchored at 5/13. The sampled share moves from 16.3% before the flop to 48.7% on the river. Label changes and share changes are different measurements; one is not a numerical substitute for the other.

The final made category is **full house**. This particular board improves the sampled comparison relative to the starting pocket. Each street uses 4,096 samples; intervals are in the receipt.

What could have happened instead?

Known street	Unseen next cards	Change dynamic label	Preserve label
Flop	47	0	47
Turn	46	41	5

Replay the discovery

Can you follow 0 dynamic label changes while the pocket frame stays anchored? **Yes.** Start with the hole cards, then use the last two revealed cards at each later street. Reconstruct the references and enjoy seeing the pattern emerge. Explore how each street connects with the made hand.

ZONE JOURNEYS

Journey 33 · one change

A fixed pocket, a moving reference frame.

POCKET

6 ♠ 7 ♣

BOARD IN REVEAL ORDER

2 ♦ 9 ♦ Q ♦ 2 ♠ 6 ♥

Follow this selected one change journey against 8 active opponents. The board was chosen to illustrate the stated transition pattern, so it is a teaching example rather than an unbiased sample of how often that pattern occurs.

Street	Dynamic refs	Near ranks	Dynamic	Pocket	MC share
Preflop	6 7 J 3	10/13	LIKELY	LIKELY	10.3%
Flop	9 Q 6 5	10/13	LIKELY	LIKELY	0.8%
Turn	Q 2	6/13	UNLIKELY	LIKELY	0.1%
River	2 6	6/13	UNLIKELY	LIKELY	0.2%

Read the changes separately

The dynamic label changes **1** time, while the pocket coverage stays anchored at 10/13. The sampled share moves from 10.3% before the flop to 0.2% on the river. Label changes and share changes are different measurements; one is not a numerical substitute for the other.

The final made category is **two pair**. This particular board does not improve the sampled comparison relative to the starting pocket. Each street uses 4,096 samples; intervals are in the receipt.

What could have happened instead?

Known street	Unseen next cards	Change dynamic label	Preserve label
Flop	47	3	44
Turn	46	0	46

Replay the discovery

Can you follow 1 dynamic label changes while the pocket frame stays anchored? **Yes.** Start with the hole cards, then use the last two revealed cards at each later street. Reconstruct the references and enjoy seeing the pattern emerge. Explore how each street connects with the made hand.

ZONE JOURNEYS

Journey 34 · two changes

A fixed pocket, a moving reference frame.

POCKET

J ♣ 4 ♦

BOARD IN REVEAL ORDER

4 ♥ J ♠ 2 ♦ Q ♠ 5 ♦

Follow this selected two changes journey against 1 active opponent. The board was chosen to illustrate the stated transition pattern, so it is a teaching example rather than an unbiased sample of how often that pattern occurs.

Street	Dynamic refs	Near ranks	Dynamic	Pocket	MC share
Preflop	J 4 K 9	10/13	LIKELY	LIKELY	47.1%
Flop	J 2	6/13	UNLIKELY	LIKELY	91.2%
Turn	2 Q	6/13	UNLIKELY	LIKELY	90.8%
River	Q 5 2 9	12/13	LIKELY	LIKELY	91.9%

Read the changes separately

The dynamic label changes **2** times, while the pocket coverage stays anchored at 10/13. The sampled share moves from 47.1% before the flop to 91.9% on the river. Label changes and share changes are different measurements; one is not a numerical substitute for the other.

The final made category is **two pair**. This particular board improves the sampled comparison relative to the starting pocket. Each street uses 4,096 samples; intervals are in the receipt.

What could have happened instead?

Known street	Unseen next cards	Change dynamic label	Preserve label
Flop	47	0	47
Turn	46	43	3

Replay the discovery

Can you follow 2 dynamic label changes while the pocket frame stays anchored? **Yes.** Start with the hole cards, then use the last two revealed cards at each later street. Reconstruct the references and enjoy seeing the pattern emerge. Explore how each street connects with the made hand.

ZONE JOURNEYS

Journey 35 · three changes

A fixed pocket, a moving reference frame.

POCKET

2 ♥ 4 ♦

BOARD IN REVEAL ORDER

8 ♠ J ♦ 3 ♠ A ♥ 4 ♠

Follow this selected three changes journey against 5 active opponents. The board was chosen to illustrate the stated transition pattern, so it is a teaching example rather than an unbiased sample of how often that pattern occurs.

Street	Dynamic refs	Near ranks	Dynamic	Pocket	MC share
Preflop	2 4	5/13	UNLIKELY	UNLIKELY	9.6%
Flop	J 3 Q T	8/13	LIKELY	UNLIKELY	3.4%
Turn	3 A 2 K	6/13	UNLIKELY	UNLIKELY	8.7%
River	A 4 3 Q	8/13	LIKELY	UNLIKELY	2.0%

Read the changes separately

The dynamic label changes **3** times, while the pocket coverage stays anchored at 5/13. The sampled share moves from 9.6% before the flop to 2.0% on the river. Label changes and share changes are different measurements; one is not a numerical substitute for the other.

The final made category is **one pair**. This particular board does not improve the sampled comparison relative to the starting pocket. Each street uses 4,096 samples; intervals are in the receipt.

What could have happened instead?

Known street	Unseen next cards	Change dynamic label	Preserve label
Flop	47	17	30
Turn	46	37	9

Replay the discovery

Can you follow 3 dynamic label changes while the pocket frame stays anchored? **Yes.** Start with the hole cards, then use the last two revealed cards at each later street. Reconstruct the references and enjoy seeing the pattern emerge. Explore how each street connects with the made hand.

ZONE JOURNEYS

Journey 36 · held likely

A fixed pocket, a moving reference frame.

POCKET

7 ♣ 5 ♠

BOARD IN REVEAL ORDER

9 ♥ K ♣ 3 ♥ K ♦ 4 ♣

Follow this selected held likely journey against 8 active opponents. The board was chosen to illustrate the stated transition pattern, so it is a teaching example rather than an unbiased sample of how often that pattern occurs.

Street	Dynamic refs	Near ranks	Dynamic	Pocket	MC share
Preflop	7 5 T 4	9/13	LIKELY	LIKELY	8.7%
Flop	K 3 A Q	7/13	LIKELY	LIKELY	2.9%
Turn	3 K A Q	7/13	LIKELY	LIKELY	0.5%
River	K 4 2 J	9/13	LIKELY	LIKELY	0.0%

Read the changes separately

The dynamic label changes **0** times, while the pocket coverage stays anchored at 9/13. The sampled share moves from 8.7% before the flop to 0.0% on the river. Label changes and share changes are different measurements; one is not a numerical substitute for the other.

The final made category is **one pair**. This particular board does not improve the sampled comparison relative to the starting pocket. Each street uses 4,096 samples; intervals are in the receipt.

What could have happened instead?

Known street	Unseen next cards	Change dynamic label	Preserve label
Flop	47	18	29
Turn	46	4	42

Replay the discovery

Can you follow 0 dynamic label changes while the pocket frame stays anchored? **Yes.** Start with the hole cards, then use the last two revealed cards at each later street. Reconstruct the references and enjoy seeing the pattern emerge. Explore how each street connects with the made hand.

ZONE JOURNEYS

Journey 37 · held unlikely

A fixed pocket, a moving reference frame.

POCKET

5 ♦ 2 ♠

BOARD IN REVEAL ORDER

5 ♣ 4 ♣ 3 ♣ 2 ♦ 2 ♣

Follow this selected held unlikely journey against 1 active opponent. The board was chosen to illustrate the stated transition pattern, so it is a teaching example rather than an unbiased sample of how often that pattern occurs.

Street	Dynamic refs	Near ranks	Dynamic	Pocket	MC share
Preflop	5 2	6/13	UNLIKELY	UNLIKELY	34.0%
Flop	4 3 5	5/13	UNLIKELY	UNLIKELY	56.1%
Turn	3 2	4/13	UNLIKELY	UNLIKELY	54.4%
River	2	3/13	UNLIKELY	UNLIKELY	90.5%

Read the changes separately

The dynamic label changes **0** times, while the pocket coverage stays anchored at 6/13. The sampled share moves from 34.0% before the flop to 90.5% on the river. Label changes and share changes are different measurements; one is not a numerical substitute for the other.

The final made category is **full house**. This particular board improves the sampled comparison relative to the starting pocket. Each street uses 4,096 samples; intervals are in the receipt.

What could have happened instead?

Known street	Unseen next cards	Change dynamic label	Preserve label
Flop	47	32	15
Turn	46	0	46

Replay the discovery

Can you follow 0 dynamic label changes while the pocket frame stays anchored? **Yes.** Start with the hole cards, then use the last two revealed cards at each later street. Reconstruct the references and enjoy seeing the pattern emerge. Explore how each street connects with the made hand.

ZONE JOURNEYS

Journey 38 · one change

A fixed pocket, a moving reference frame.

POCKET

5 ♥ 4 ♥

BOARD IN REVEAL ORDER

5 ♣ J ♦ T ♣ 2 ♥ 9 ♥

Follow this selected one change journey against 5 active opponents. The board was chosen to illustrate the stated transition pattern, so it is a teaching example rather than an unbiased sample of how often that pattern occurs.

Street	Dynamic refs	Near ranks	Dynamic	Pocket	MC share
Preflop	5 4 7 3	7/13	LIKELY	LIKELY	16.1%
Flop	J T 6 3	10/13	LIKELY	LIKELY	12.7%
Turn	T 2	6/13	UNLIKELY	LIKELY	10.6%
River	2 9	6/13	UNLIKELY	LIKELY	2.5%

Read the changes separately

The dynamic label changes **1** time, while the pocket coverage stays anchored at 7/13. The sampled share moves from 16.1% before the flop to 2.5% on the river. Label changes and share changes are different measurements; one is not a numerical substitute for the other.

The final made category is **one pair**. This particular board does not improve the sampled comparison relative to the starting pocket. Each street uses 4,096 samples; intervals are in the receipt.

What could have happened instead?

Known street	Unseen next cards	Change dynamic label	Preserve label
Flop	47	4	43
Turn	46	0	46

Replay the discovery

Can you follow 1 dynamic label changes while the pocket frame stays anchored? **Yes.** Start with the hole cards, then use the last two revealed cards at each later street. Reconstruct the references and enjoy seeing the pattern emerge. Explore how each street connects with the made hand.

ZONE JOURNEYS

Journey 39 · two changes

A fixed pocket, a moving reference frame.

POCKET

4 ♠ 7 ♣

BOARD IN REVEAL ORDER

7 ♥ 7 ♦ 2 ♥ 3 ♠ 9 ♦

Follow this selected two changes journey against 8 active opponents. The board was chosen to illustrate the stated transition pattern, so it is a teaching example rather than an unbiased sample of how often that pattern occurs.

Street	Dynamic refs	Near ranks	Dynamic	Pocket	MC share
Preflop	4 7 9 5	8/13	LIKELY	LIKELY	6.7%
Flop	7 2	6/13	UNLIKELY	LIKELY	59.0%
Turn	2 3	4/13	UNLIKELY	LIKELY	60.0%
River	3 9 T 8	8/13	LIKELY	LIKELY	60.6%

Read the changes separately

The dynamic label changes **2** times, while the pocket coverage stays anchored at 8/13. The sampled share moves from 6.7% before the flop to 60.6% on the river. Label changes and share changes are different measurements; one is not a numerical substitute for the other.

The final made category is **three of a kind**. This particular board improves the sampled comparison relative to the starting pocket. Each street uses 4,096 samples; intervals are in the receipt.

What could have happened instead?

Known street	Unseen next cards	Change dynamic label	Preserve label
Flop	47	0	47
Turn	46	29	17

Replay the discovery

Can you follow 2 dynamic label changes while the pocket frame stays anchored? **Yes.** Start with the hole cards, then use the last two revealed cards at each later street. Reconstruct the references and enjoy seeing the pattern emerge. Explore how each street connects with the made hand.

ZONE JOURNEYS

Journey 40 · three changes

A fixed pocket, a moving reference frame.

POCKET

T ♥ K ♦

BOARD IN REVEAL ORDER

8 ♣ 3 ♠ 5 ♦ 5 ♣ 2 ♣

Follow this selected three changes journey against 1 active opponent. The board was chosen to illustrate the stated transition pattern, so it is a teaching example rather than an unbiased sample of how often that pattern occurs.

Street	Dynamic refs	Near ranks	Dynamic	Pocket	MC share
Preflop	T K 8 5	11/13	LIKELY	LIKELY	61.4%
Flop	3 5 6 4	6/13	UNLIKELY	LIKELY	42.0%
Turn	5 8 2	9/13	LIKELY	LIKELY	45.5%
River	5 2	6/13	UNLIKELY	LIKELY	32.1%

Read the changes separately

The dynamic label changes **3** times, while the pocket coverage stays anchored at 11/13. The sampled share moves from 61.4% before the flop to 32.1% on the river. Label changes and share changes are different measurements; one is not a numerical substitute for the other.

The final made category is **one pair**. This particular board does not improve the sampled comparison relative to the starting pocket. Each street uses 4,096 samples; intervals are in the receipt.

What could have happened instead?

Known street	Unseen next cards	Change dynamic label	Preserve label
Flop	47	40	7
Turn	46	7	39

Replay the discovery

Can you follow 3 dynamic label changes while the pocket frame stays anchored? **Yes.** Start with the hole cards, then use the last two revealed cards at each later street. Reconstruct the references and enjoy seeing the pattern emerge. Explore how each street connects with the made hand.

MONTE CARLO EXPERIMENTS

Experiment 01 · Change the opposing range

Change one thing. Keep the question precise.

POCKET

9 ♠ 4 ♠

PUBLIC BOARD
Preflop

Fixed preflop fixture 2/preflop/true/0. Change the indicated variable while keeping the displayed pocket and board. These are showdown studies with betting held fixed.

Assumed width	MC share	Approx. 95% interval	WSRF
15%	35.2%	34.4%–35.9%	36.4%
25%	35.2%	34.5%–36.0%	36.4%
40%	36.6%	35.9%–37.3%	37.5%
60%	38.3%	37.5%–39.0%	37.5%
80%	40.4%	39.6%–41.1%	39.1%
100%	43.3%	42.5%–44.0%	45.1%

Read the sensitivity

The measured endpoints are 35.2% and 43.3%. A hint that depends on only a few points of estimated share deserves a range check when this spread is larger. Each row uses 16,384 samples, so the sampling scale is visible alongside the effect of changing the assumption.

The width parameter changes rejection-sampling weights through a preflop-strength function. It is not a hard instruction to keep exactly that percentage of the 1,326 physical pockets. Suits and ranks enter the weighting function; each opposing pocket is sampled from that public-information model.

Your discovery: Can changing one assumption at a time help you explore this pattern? **Yes.** Keep the starting cards fixed, choose one variable, and compare the resulting estimates. Each carefully framed experiment gives the next idea a clearer starting point.

MONTE CARLO EXPERIMENTS

Experiment 02 · Change the size of the field

Change one thing. Keep the question precise.

POCKET

Q ♣ 3 ♥

PUBLIC BOARD

2 ♥ 2 ♠ 8 ♣

Fixed flop fixture 2/flop/false/2. Change the indicated variable while keeping the displayed pocket and board. These are showdown studies with betting held fixed.

Active opponents	MC share	Approx. 95% interval	WSRF
1	39.6%	38.6%–40.7%	39.9%
2	19.3%	18.4%–20.1%	17.2%
3	11.0%	10.3%–11.6%	9.4%
4	7.3%	6.7%–7.8%	8.8%
5	5.4%	4.9%–5.8%	6.7%
6	4.1%	3.7%–4.5%	5.3%
7	3.0%	2.7%–3.4%	3.0%
8	2.6%	2.2%–2.9%	2.8%

Keep the field explicit

Each row draws disjoint opposing pockets and evaluates the whole active field. This is not a sequence of independent heads-up wins multiplied together. Shared cards, ties and card removal are handled by the same showdown simulation.

At a live table, active players contest the pot after folded players step aside. The field-size experiment therefore changes active opponents, not merely empty chairs or the historical number of players who were dealt in. Each row uses 8,192 samples under the same stated width assumption.

Your discovery: Can changing one assumption at a time help you explore this pattern? **Yes.** Keep the starting cards fixed, choose one variable, and compare the resulting estimates. Each carefully framed experiment gives the next idea a clearer starting point.

MONTE CARLO EXPERIMENTS

Experiment 03 · Watch averages settle

Change one thing. Keep the question precise.

POCKET

Q ♣ 5 ♦

PUBLIC BOARD

K ♣ 9 ♣ 9 ♠ 2 ♣ Q ♦

Fixed river fixture 2/river/false/1. Change the indicated variable while keeping the displayed pocket and board. These are showdown studies with betting held fixed.

Samples / estimate	Repeated estimates	Average estimate	Observed spread	Average reported SE
64	24	66.2%	6.14%	5.70%
256	24	68.5%	2.73%	2.78%
1024	24	68.3%	1.19%	1.40%
4096	24	68.5%	0.79%	0.70%

A repeated-estimate experiment

For each sample budget, twenty-four independent estimates are generated. The observed standard deviation of those estimates can be compared with their average reported standard error. They need not match exactly: twenty-four repetitions are themselves a finite experiment.

A fourfold increase in sample count should roughly halve standard error under independent sampling. Inspect the ratios instead of demanding a perfectly smooth sequence. A small estimate can land close to the long-run mean by luck, and a larger one can land farther away in a particular repetition.

Budget	Lowest repeat	Highest repeat
64	54.7%	82.0%
256	63.1%	74.6%
1024	65.6%	70.4%
4096	66.5%	69.7%

The spread here describes repeated calculations for one fixed spot. It is not the standard deviation of a player's chip profit across a season, nor a promise that future hands will cluster around this one showdown value.

Your discovery: Can changing one assumption at a time help you explore this pattern? **Yes.** Keep the starting cards fixed, choose one variable, and compare the resulting estimates. Each carefully framed experiment gives the next idea a clearer starting point.

MONTE CARLO EXPERIMENTS

Experiment 04 · Look inside the buckets

Change one thing. Keep the question precise.

POCKET

A ♠ 9 ♥

PUBLIC BOARD

5 ♣ 5 ♦ 2 ♦

Fixed flop fixture 6/flop/false/0. Change the indicated variable while keeping the displayed pocket and board. These are showdown studies with betting held fixed.

Bucket	Unseen cards	Uniform bucket share	Mean share after card
0 away	14	29.8%	22.8%
1 away	15	31.9%	9.9%
2 away	14	29.8%	10.7%
3+ away	4	8.5%	10.2%

Composition and consequence

Every possible next card is assigned to its pocket-distance bucket. For each card, 2,048 future showdowns are sampled, then the estimates are averaged uniformly within the bucket. This separates the frequency of a bucket from the consequence of its cards in this particular hand.

A bucket may contain very different poker events: a suit completion, a board pair, a helpful kicker, or a card that strengthens opposing ranges. Its name cannot tell you which event dominates. The exact card list in the receipt allows the average to be opened up again.

Bucket	Card ranks represented
0	7 8 9 A
1	2 6 T K
2	3 J Q 5
3+	4

These are selected examples, not a causal experiment proving that distance itself creates an edge. The map groups card identities; the showdown calculation evaluates their poker consequences under the same opponent model.

Your discovery: Can changing one assumption at a time help you explore this pattern? **Yes.** Keep the starting cards fixed, choose one variable, and compare the resulting estimates. Each carefully framed experiment gives the next idea a clearer starting point.

MONTE CARLO EXPERIMENTS

Experiment 05 · Change the opposing range

Change one thing. Keep the question precise.

POCKET

3 ♥ Q ♠

PUBLIC BOARD

9 ♥ 4 ♣ 4 ♦ 6 ♣ A ♥

Fixed river fixture 6/river/true/2. Change the indicated variable while keeping the displayed pocket and board. These are showdown studies with betting held fixed.

Assumed width	MC share	Approx. 95% interval	WSRF
15%	3.0%	2.8%–3.2%	4.3%
25%	3.4%	3.2%–3.7%	4.3%
40%	4.0%	3.7%–4.3%	4.5%
60%	5.2%	4.9%–5.5%	4.5%
80%	7.7%	7.4%–8.1%	4.6%
100%	11.3%	10.9%–11.8%	8.3%

Read the sensitivity

The measured endpoints are 3.0% and 11.3%. A hint that depends on only a few points of estimated share deserves a range check when this spread is larger. Each row uses 16,384 samples, so the sampling scale is visible alongside the effect of changing the assumption.

The width parameter changes rejection-sampling weights through a preflop-strength function. It is not a hard instruction to keep exactly that percentage of the 1,326 physical pockets. Suits and ranks enter the weighting function; each opposing pocket is sampled from that public-information model.

Your discovery: Can changing one assumption at a time help you explore this pattern? **Yes.** Keep the starting cards fixed, choose one variable, and compare the resulting estimates. Each carefully framed experiment gives the next idea a clearer starting point.

MONTE CARLO EXPERIMENTS

Experiment 06 · Change the size of the field

Change one thing. Keep the question precise.

POCKET

J ♦ 5 ♠

PUBLIC BOARD

K ♦ 8 ♦ K ♣

Fixed flop fixture 9/flop/true/1. Change the indicated variable while keeping the displayed pocket and board. These are showdown studies with betting held fixed.

Active opponents	MC share	Approx. 95% interval	WSRF
1	44.1%	43.1%–45.2%	37.1%
2	22.4%	21.5%–23.3%	18.1%
3	14.7%	14.0%–15.4%	9.0%
4	10.5%	9.9%–11.2%	7.9%
5	7.4%	6.9%–7.9%	7.3%
6	6.0%	5.5%–6.5%	3.2%
7	4.5%	4.1%–4.9%	3.2%
8	3.9%	3.5%–4.3%	2.8%

Keep the field explicit

Each row draws disjoint opposing pockets and evaluates the whole active field. This is not a sequence of independent heads-up wins multiplied together. Shared cards, ties and card removal are handled by the same showdown simulation.

At a live table, active players contest the pot after folded players step aside. The field-size experiment therefore changes active opponents, not merely empty chairs or the historical number of players who were dealt in. Each row uses 8,192 samples under the same stated width assumption.

Your discovery: Can changing one assumption at a time help you explore this pattern? **Yes.** Keep the starting cards fixed, choose one variable, and compare the resulting estimates. Each carefully framed experiment gives the next idea a clearer starting point.

MONTE CARLO EXPERIMENTS

Experiment 07 · Watch averages settle

Change one thing. Keep the question precise.

POCKET

Q ♦ 8 ♥

PUBLIC BOARD

5 ♥ 7 ♥ 6 ♣ 3 ♥ 6 ♠

Fixed river fixture 9/river/true/0. Change the indicated variable while keeping the displayed pocket and board. These are showdown studies with betting held fixed.

Samples / estimate	Repeated estimates	Average estimate	Observed spread	Average reported SE
64	24	14.3%	4.41%	4.28%
256	24	14.1%	2.14%	2.15%
1024	24	14.0%	1.18%	1.07%
4096	24	14.3%	0.54%	0.54%

A repeated-estimate experiment

For each sample budget, twenty-four independent estimates are generated. The observed standard deviation of those estimates can be compared with their average reported standard error. They need not match exactly: twenty-four repetitions are themselves a finite experiment.

A fourfold increase in sample count should roughly halve standard error under independent sampling. Inspect the ratios instead of demanding a perfectly smooth sequence. A small estimate can land close to the long-run mean by luck, and a larger one can land farther away in a particular repetition.

Budget	Lowest repeat	Highest repeat
64	7.0%	22.7%
256	10.7%	18.4%
1024	10.6%	15.5%
4096	13.4%	15.2%

The spread here describes repeated calculations for one fixed spot. It is not the standard deviation of a player's chip profit across a season, nor a promise that future hands will cluster around this one showdown value.

Your discovery: Can changing one assumption at a time help you explore this pattern? **Yes.** Keep the starting cards fixed, choose one variable, and compare the resulting estimates. Each carefully framed experiment gives the next idea a clearer starting point.

MONTE CARLO EXPERIMENTS

Experiment 08 · Look inside the buckets

Change one thing. Keep the question precise.

POCKET

2 ♥ 9 ♥

PUBLIC BOARD

Preflop

Fixed preflop fixture 2/preflop/false/2. Change the indicated variable while keeping the displayed pocket and board. These are showdown studies with betting held fixed.

Bucket	Unseen cards	Uniform bucket share	Event measured
0 away	6	12.0%	Composition only
1 away	16	32.0%	Composition only
2 away	16	32.0%	Composition only
3+ away	12	24.0%	Composition only

Composition and consequence

This exercise follows whole-street updates: preflop reveals a three-card flop, while the river is complete. The table therefore reports exact unseen-card composition only. It does not invent a next-street equity value.

A bucket may contain very different poker events: a suit completion, a board pair, a helpful kicker, or a card that strengthens opposing ranges. Its name cannot tell you which event dominates. The exact card list in the receipt allows the average to be opened up again.

Bucket	Card ranks represented
0	2 9
1	3 8 T A
2	4 7 J K
3+	5 6 Q

These are selected examples, not a causal experiment proving that distance itself creates an edge. The map groups card identities; the showdown calculation evaluates their poker consequences under the same opponent model.

Your discovery: Can changing one assumption at a time help you explore this pattern? **Yes.** Keep the starting cards fixed, choose one variable, and compare the resulting estimates. Each carefully framed experiment gives the next idea a clearer starting point.

MONTE CARLO EXPERIMENTS

Experiment 09 · Change the opposing range

Change one thing. Keep the question precise.

POCKET

T ♠ 4 ♠

PUBLIC BOARD

9 ♥ 3 ♥ 2 ♥ 2 ♠

Fixed turn fixture 2/turn/false/1. Change the indicated variable while keeping the displayed pocket and board. These are showdown studies with betting held fixed.

Assumed width	MC share	Approx. 95% interval	WSRF
15%	11.1%	10.6%–11.5%	16.8%
25%	11.6%	11.2%–12.1%	16.8%
40%	12.7%	12.2%–13.2%	16.9%
60%	14.1%	13.6%–14.7%	16.9%
80%	16.9%	16.3%–17.4%	18.8%
100%	18.4%	17.8%–19.0%	28.3%

Read the sensitivity

The measured endpoints are 11.1% and 18.4%. A hint that depends on only a few points of estimated share deserves a range check when this spread is larger. Each row uses 16,384 samples, so the sampling scale is visible alongside the effect of changing the assumption.

The width parameter changes rejection-sampling weights through a preflop-strength function. It is not a hard instruction to keep exactly that percentage of the 1,326 physical pockets. Suits and ranks enter the weighting function; each opposing pocket is sampled from that public-information model.

Your discovery: Can changing one assumption at a time help you explore this pattern? **Yes.** Keep the starting cards fixed, choose one variable, and compare the resulting estimates. Each carefully framed experiment gives the next idea a clearer starting point.

MONTE CARLO EXPERIMENTS

Experiment 10 · Change the size of the field

Change one thing. Keep the question precise.

POCKET

T ♥ 2 ♦

PUBLIC BOARD
Preflop

Fixed preflop fixture 6/preflop/false/0. Change the indicated variable while keeping the displayed pocket and board. These are showdown studies with betting held fixed.

Active opponents	MC share	Approx. 95% interval	WSRF
1	41.2%	40.2%–42.3%	41.8%
2	24.1%	23.2%–25.0%	24.4%
3	16.5%	15.8%–17.3%	17.0%
4	12.3%	11.7%–13.0%	13.0%
5	11.0%	10.4%–11.7%	10.0%
6	8.7%	8.1%–9.2%	8.7%
7	7.8%	7.3%–8.4%	8.1%
8	6.5%	6.0%–7.0%	6.3%

Keep the field explicit

Each row draws disjoint opposing pockets and evaluates the whole active field. This is not a sequence of independent heads-up wins multiplied together. Shared cards, ties and card removal are handled by the same showdown simulation.

At a live table, active players contest the pot after folded players step aside. The field-size experiment therefore changes active opponents, not merely empty chairs or the historical number of players who were dealt in. Each row uses 8,192 samples under the same stated width assumption.

Your discovery: Can changing one assumption at a time help you explore this pattern? **Yes.** Keep the starting cards fixed, choose one variable, and compare the resulting estimates. Each carefully framed experiment gives the next idea a clearer starting point.

MONTE CARLO EXPERIMENTS

Experiment 11 · Watch averages settle

Change one thing. Keep the question precise.

POCKET

4 ♠ 8 ♠

PUBLIC BOARD

A ♥ 6 ♦ Q ♦ K ♣

Fixed turn fixture 6/turn/true/2. Change the indicated variable while keeping the displayed pocket and board. These are showdown studies with betting held fixed.

Samples / estimate	Repeated estimates	Average estimate	Observed spread	Average reported SE
64	24	4.9%	2.96%	2.27%
256	24	5.1%	0.81%	1.25%
1024	24	5.3%	0.73%	0.64%
4096	24	5.2%	0.29%	0.32%

A repeated-estimate experiment

For each sample budget, twenty-four independent estimates are generated. The observed standard deviation of those estimates can be compared with their average reported standard error. They need not match exactly: twenty-four repetitions are themselves a finite experiment.

A fourfold increase in sample count should roughly halve standard error under independent sampling. Inspect the ratios instead of demanding a perfectly smooth sequence. A small estimate can land close to the long-run mean by luck, and a larger one can land farther away in a particular repetition.

Budget	Lowest repeat	Highest repeat
64	0.5%	9.6%
256	3.8%	6.4%
1024	3.9%	6.7%
4096	4.7%	5.9%

The spread here describes repeated calculations for one fixed spot. It is not the standard deviation of a player's chip profit across a season, nor a promise that future hands will cluster around this one showdown value.

Your discovery: Can changing one assumption at a time help you explore this pattern? **Yes.** Keep the starting cards fixed, choose one variable, and compare the resulting estimates. Each carefully framed experiment gives the next idea a clearer starting point.

MONTE CARLO EXPERIMENTS

Experiment 12 · Look inside the buckets

Change one thing. Keep the question precise.

POCKET

7 ♠ Q ♦

PUBLIC BOARD

Preflop

Fixed preflop fixture 9/preflop/true/1. Change the indicated variable while keeping the displayed pocket and board. These are showdown studies with betting held fixed.

Bucket	Unseen cards	Uniform bucket share	Event measured
0 away	10	20.0%	Composition only
1 away	24	48.0%	Composition only
2 away	16	32.0%	Composition only
3+ away	0	0.0%	Composition only

Composition and consequence

This exercise follows whole-street updates: preflop reveals a three-card flop, while the river is complete. The table therefore reports exact unseen-card composition only. It does not invent a next-street equity value.

A bucket may contain very different poker events: a suit completion, a board pair, a helpful kicker, or a card that strengthens opposing ranges. Its name cannot tell you which event dominates. The exact card list in the receipt allows the average to be opened up again.

Bucket	Card ranks represented
0	4 7 Q
1	3 5 6 8 J K
2	2 9 T A
3+	Empty bucket

These are selected examples, not a causal experiment proving that distance itself creates an edge. The map groups card identities; the showdown calculation evaluates their poker consequences under the same opponent model.

Your discovery: Can changing one assumption at a time help you explore this pattern? **Yes.** Keep the starting cards fixed, choose one variable, and compare the resulting estimates. Each carefully framed experiment gives the next idea a clearer starting point.

MONTE CARLO EXPERIMENTS

Experiment 13 · Change the opposing range

Change one thing. Keep the question precise.

POCKET

9 ♦ J ♣

PUBLIC BOARD

6 ♦ 5 ♠ 4 ♣ 8 ♦

Fixed turn fixture 9/turn/true/0. Change the indicated variable while keeping the displayed pocket and board. These are showdown studies with betting held fixed.

Assumed width	MC share	Approx. 95% interval	WSRF
15%	12.8%	12.3%–13.3%	18.1%
25%	13.0%	12.5%–13.5%	18.1%
40%	13.1%	12.6%–13.6%	18.1%
60%	12.8%	12.3%–13.3%	18.1%
80%	13.8%	13.3%–14.3%	18.5%
100%	13.3%	12.8%–13.9%	18.9%

Read the sensitivity

The measured endpoints are 12.8% and 13.3%. A hint that depends on only a few points of estimated share deserves a range check when this spread is larger. Each row uses 16,384 samples, so the sampling scale is visible alongside the effect of changing the assumption.

The width parameter changes rejection-sampling weights through a preflop-strength function. It is not a hard instruction to keep exactly that percentage of the 1,326 physical pockets. Suits and ranks enter the weighting function; each opposing pocket is sampled from that public-information model.

Your discovery: Can changing one assumption at a time help you explore this pattern? **Yes.** Keep the starting cards fixed, choose one variable, and compare the resulting estimates. Each carefully framed experiment gives the next idea a clearer starting point.

MONTE CARLO EXPERIMENTS

Experiment 14 · Change the size of the field

Change one thing. Keep the question precise.

POCKET

5 ♦ 5 ♣

PUBLIC BOARD

Q ♥ K ♦ Q ♦ 2 ♣ 2 ♥

Fixed river fixture 9/river/false/2. Change the indicated variable while keeping the displayed pocket and board. These are showdown studies with betting held fixed.

Active opponents	MC share	Approx. 95% interval	WSRF
1	66.4%	65.3%–67.4%	42.7%
2	43.5%	42.4%–44.6%	6.6%
3	28.2%	27.2%–29.1%	10.5%
4	17.6%	16.8%–18.4%	9.8%
5	10.9%	10.2%–11.6%	9.8%
6	6.4%	5.9%–6.9%	9.2%
7	3.9%	3.5%–4.4%	9.2%
8	2.0%	1.7%–2.3%	9.2%

Keep the field explicit

Each row draws disjoint opposing pockets and evaluates the whole active field. This is not a sequence of independent heads-up wins multiplied together. Shared cards, ties and card removal are handled by the same showdown simulation.

At a live table, active players contest the pot after folded players step aside. The field-size experiment therefore changes active opponents, not merely empty chairs or the historical number of players who were dealt in. Each row uses 8,192 samples under the same stated width assumption.

Your discovery: Can changing one assumption at a time help you explore this pattern? **Yes.** Keep the starting cards fixed, choose one variable, and compare the resulting estimates. Each carefully framed experiment gives the next idea a clearer starting point.

MONTE CARLO EXPERIMENTS

Experiment 15 · Watch averages settle

Change one thing. Keep the question precise.

POCKET

6 ♥ K ♦

PUBLIC BOARD

6 ♠ 5 ♥ 3 ♥

Fixed flop fixture 2/flop/false/1. Change the indicated variable while keeping the displayed pocket and board. These are showdown studies with betting held fixed.

Samples / estimate	Repeated estimates	Average estimate	Observed spread	Average reported SE
64	24	64.9%	4.45%	5.86%
256	24	65.0%	3.61%	2.93%
1024	24	65.4%	1.18%	1.46%
4096	24	65.4%	0.80%	0.73%

A repeated-estimate experiment

For each sample budget, twenty-four independent estimates are generated. The observed standard deviation of those estimates can be compared with their average reported standard error. They need not match exactly: twenty-four repetitions are themselves a finite experiment.

A fourfold increase in sample count should roughly halve standard error under independent sampling. Inspect the ratios instead of demanding a perfectly smooth sequence. A small estimate can land close to the long-run mean by luck, and a larger one can land farther away in a particular repetition.

Budget	Lowest repeat	Highest repeat
64	55.5%	71.9%
256	56.6%	71.1%
1024	63.2%	67.8%
4096	63.8%	66.7%

The spread here describes repeated calculations for one fixed spot. It is not the standard deviation of a player's chip profit across a season, nor a promise that future hands will cluster around this one showdown value.

Your discovery: Can changing one assumption at a time help you explore this pattern? **Yes.** Keep the starting cards fixed, choose one variable, and compare the resulting estimates. Each carefully framed experiment gives the next idea a clearer starting point.

MONTE CARLO EXPERIMENTS

Experiment 16 · Look inside the buckets

Change one thing. Keep the question precise.

POCKET

A ♣ 9 ♦

PUBLIC BOARD

Q ♦ 8 ♣ 6 ♣ 2 ♥ 4 ♥

Fixed river fixture 2/river/false/0. Change the indicated variable while keeping the displayed pocket and board. These are showdown studies with betting held fixed.

Bucket	Unseen cards	Uniform bucket share	Event measured
0 away	13	28.9%	Composition only
1 away	14	31.1%	Composition only
2 away	15	33.3%	Composition only
3+ away	3	6.7%	Composition only

Composition and consequence

This exercise follows whole-street updates: preflop reveals a three-card flop, while the river is complete. The table therefore reports exact unseen-card composition only. It does not invent a next-street equity value.

A bucket may contain very different poker events: a suit completion, a board pair, a helpful kicker, or a card that strengthens opposing ranges. Its name cannot tell you which event dominates. The exact card list in the receipt allows the average to be opened up again.

Bucket	Card ranks represented
0	7 9 8 A
1	2 T K 6
2	3 5 J Q
3+	4

These are selected examples, not a causal experiment proving that distance itself creates an edge. The map groups card identities; the showdown calculation evaluates their poker consequences under the same opponent model.

Your discovery: Can changing one assumption at a time help you explore this pattern? **Yes.** Keep the starting cards fixed, choose one variable, and compare the resulting estimates. Each carefully framed experiment gives the next idea a clearer starting point.

MONTE CARLO EXPERIMENTS

Experiment 17 · Change the opposing range

Change one thing. Keep the question precise.

POCKET

5 ♦ T ♣

PUBLIC BOARD

6 ♠ A ♦ 8 ♠

Fixed flop fixture 6/flop/true/2. Change the indicated variable while keeping the displayed pocket and board. These are showdown studies with betting held fixed.

Assumed width	MC share	Approx. 95% interval	WSRF
15%	7.6%	7.2%–8.0%	9.8%
25%	7.3%	6.9%–7.7%	9.8%
40%	8.0%	7.6%–8.4%	10.1%
60%	8.7%	8.3%–9.1%	10.1%
80%	10.3%	9.9%–10.8%	12.4%
100%	12.6%	12.1%–13.1%	14.0%

Read the sensitivity

The measured endpoints are 7.6% and 12.6%. A hint that depends on only a few points of estimated share deserves a range check when this spread is larger. Each row uses 16,384 samples, so the sampling scale is visible alongside the effect of changing the assumption.

The width parameter changes rejection-sampling weights through a preflop-strength function. It is not a hard instruction to keep exactly that percentage of the 1,326 physical pockets. Suits and ranks enter the weighting function; each opposing pocket is sampled from that public-information model.

Your discovery: Can changing one assumption at a time help you explore this pattern? **Yes.** Keep the starting cards fixed, choose one variable, and compare the resulting estimates. Each carefully framed experiment gives the next idea a clearer starting point.

MONTE CARLO EXPERIMENTS

Experiment 18 · Change the size of the field

Change one thing. Keep the question precise.

POCKET

J ♠ 9 ♦

PUBLIC BOARD

6 ♠ T ♠ 3 ♦ A ♦ Q ♣

Fixed river fixture 6/river/true/1. Change the indicated variable while keeping the displayed pocket and board. These are showdown studies with betting held fixed.

Active opponents	MC share	Approx. 95% interval	WSRF
1	29.1%	28.1%–30.1%	25.1%
2	7.5%	7.0%–8.1%	4.4%
3	1.9%	1.6%–2.2%	1.7%
4	0.3%	0.2%–0.4%	0.5%
5	0.1%	0.0%–0.2%	0.0%
6	0.0%	0.0%–0.1%	0.0%
7	0.0%	0.0%–0.0%	0.0%
8	0.0%	0.0%–0.0%	0.0%

Keep the field explicit

Each row draws disjoint opposing pockets and evaluates the whole active field. This is not a sequence of independent heads-up wins multiplied together. Shared cards, ties and card removal are handled by the same showdown simulation.

At a live table, active players contest the pot after folded players step aside. The field-size experiment therefore changes active opponents, not merely empty chairs or the historical number of players who were dealt in. Each row uses 8,192 samples under the same stated width assumption.

Your discovery: Can changing one assumption at a time help you explore this pattern? **Yes.** Keep the starting cards fixed, choose one variable, and compare the resulting estimates. Each carefully framed experiment gives the next idea a clearer starting point.

MONTE CARLO EXPERIMENTS

Experiment 19 · Watch averages settle

Change one thing. Keep the question precise.

POCKET

J ♣ 7 ♦

PUBLIC BOARD

Q ♥ 4 ♠ 8 ♦

Fixed flop fixture 9/flop/true/0. Change the indicated variable while keeping the displayed pocket and board. These are showdown studies with betting held fixed.

Samples / estimate	Repeated estimates	Average estimate	Observed spread	Average reported SE
64	24	7.2%	3.76%	3.00%
256	24	6.9%	1.41%	1.51%
1024	24	7.4%	0.79%	0.79%
4096	24	7.1%	0.36%	0.39%

A repeated-estimate experiment

For each sample budget, twenty-four independent estimates are generated. The observed standard deviation of those estimates can be compared with their average reported standard error. They need not match exactly: twenty-four repetitions are themselves a finite experiment.

A fourfold increase in sample count should roughly halve standard error under independent sampling. Inspect the ratios instead of demanding a perfectly smooth sequence. A small estimate can land close to the long-run mean by luck, and a larger one can land farther away in a particular repetition.

Budget	Lowest repeat	Highest repeat
64	0.8%	15.6%
256	4.3%	10.0%
1024	5.2%	8.9%
4096	6.3%	7.6%

The spread here describes repeated calculations for one fixed spot. It is not the standard deviation of a player's chip profit across a season, nor a promise that future hands will cluster around this one showdown value.

Your discovery: Can changing one assumption at a time help you explore this pattern? **Yes.** Keep the starting cards fixed, choose one variable, and compare the resulting estimates. Each carefully framed experiment gives the next idea a clearer starting point.

MONTE CARLO EXPERIMENTS

Experiment 20 · Look inside the buckets

Change one thing. Keep the question precise.

POCKET

4 ♣ 2 ♠

PUBLIC BOARD

K ♠ J ♦ 2 ♦ Q ♦

Fixed turn fixture 9/turn/false/2. Change the indicated variable while keeping the displayed pocket and board. These are showdown studies with betting held fixed.

Bucket	Unseen cards	Uniform bucket share	Mean share after card
0 away	5	10.9%	80.9%
1 away	12	26.1%	33.1%
2 away	7	15.2%	39.7%
3+ away	22	47.8%	35.9%

Composition and consequence

Every possible next card is assigned to its pocket-distance bucket. For each card, 2,048 future showdowns are sampled, then the estimates are averaged uniformly within the bucket. This separates the frequency of a bucket from the consequence of its cards in this particular hand.

A bucket may contain very different poker events: a suit completion, a board pair, a helpful kicker, or a card that strengthens opposing ranges. Its name cannot tell you which event dominates. The exact card list in the receipt allows the average to be opened up again.

Bucket	Card ranks represented
0	2 4
1	3 5 A
2	6 K
3+	7 8 9 T J Q

These are selected examples, not a causal experiment proving that distance itself creates an edge. The map groups card identities; the showdown calculation evaluates their poker consequences under the same opponent model.

Your discovery: Can changing one assumption at a time help you explore this pattern? **Yes.** Keep the starting cards fixed, choose one variable, and compare the resulting estimates. Each carefully framed experiment gives the next idea a clearer starting point.

MONTE CARLO EXPERIMENTS

Experiment 21 · Change the opposing range

Change one thing. Keep the question precise.

POCKET

2 ♣ J ♥

PUBLIC BOARD
Preflop

Fixed preflop fixture 2/preflop/false/1. Change the indicated variable while keeping the displayed pocket and board. These are showdown studies with betting held fixed.

Assumed width	MC share	Approx. 95% interval	WSRF
15%	34.5%	33.8%–35.3%	35.0%
25%	34.7%	34.0%–35.5%	35.0%
40%	35.9%	35.2%–36.6%	36.9%
60%	38.2%	37.4%–38.9%	36.9%
80%	40.0%	39.3%–40.7%	40.3%
100%	44.0%	43.2%–44.7%	44.6%

Read the sensitivity

The measured endpoints are 34.5% and 44.0%. A hint that depends on only a few points of estimated share deserves a range check when this spread is larger. Each row uses 16,384 samples, so the sampling scale is visible alongside the effect of changing the assumption.

The width parameter changes rejection-sampling weights through a preflop-strength function. It is not a hard instruction to keep exactly that percentage of the 1,326 physical pockets. Suits and ranks enter the weighting function; each opposing pocket is sampled from that public-information model.

Your discovery: Can changing one assumption at a time help you explore this pattern? **Yes.** Keep the starting cards fixed, choose one variable, and compare the resulting estimates. Each carefully framed experiment gives the next idea a clearer starting point.

MONTE CARLO EXPERIMENTS

Experiment 22 · Change the size of the field

Change one thing. Keep the question precise.

POCKET

9 ♣ 6 ♦

PUBLIC BOARD

5 ♦ 3 ♠ K ♦ 2 ♠

Fixed turn fixture 2/turn/false/0. Change the indicated variable while keeping the displayed pocket and board. These are showdown studies with betting held fixed.

Active opponents	MC share	Approx. 95% interval	WSRF
1	21.0%	20.2%–21.9%	22.0%
2	12.7%	12.0%–13.4%	12.9%
3	10.0%	9.4%–10.6%	9.3%
4	7.9%	7.3%–8.4%	7.9%
5	7.4%	6.8%–7.9%	7.4%
6	6.2%	5.7%–6.7%	5.9%
7	5.0%	4.6%–5.4%	5.4%
8	4.1%	3.8%–4.5%	4.3%

Keep the field explicit

Each row draws disjoint opposing pockets and evaluates the whole active field. This is not a sequence of independent heads-up wins multiplied together. Shared cards, ties and card removal are handled by the same showdown simulation.

At a live table, active players contest the pot after folded players step aside. The field-size experiment therefore changes active opponents, not merely empty chairs or the historical number of players who were dealt in. Each row uses 8,192 samples under the same stated width assumption.

Your discovery: Can changing one assumption at a time help you explore this pattern? **Yes.** Keep the starting cards fixed, choose one variable, and compare the resulting estimates. Each carefully framed experiment gives the next idea a clearer starting point.

MONTE CARLO EXPERIMENTS

Experiment 23 · Watch averages settle

Change one thing. Keep the question precise.

POCKET

9 ♣ Q ♦

PUBLIC BOARD

Preflop

Fixed preflop fixture 6/preflop/true/2. Change the indicated variable while keeping the displayed pocket and board. These are showdown studies with betting held fixed.

Samples / estimate	Repeated estimates	Average estimate	Observed spread	Average reported SE
64	24	18.9%	4.12%	4.78%
256	24	18.9%	2.28%	2.39%
1024	24	19.1%	0.86%	1.20%
4096	24	18.9%	0.70%	0.60%

A repeated-estimate experiment

For each sample budget, twenty-four independent estimates are generated. The observed standard deviation of those estimates can be compared with their average reported standard error. They need not match exactly: twenty-four repetitions are themselves a finite experiment.

A fourfold increase in sample count should roughly halve standard error under independent sampling. Inspect the ratios instead of demanding a perfectly smooth sequence. A small estimate can land close to the long-run mean by luck, and a larger one can land farther away in a particular repetition.

Budget	Lowest repeat	Highest repeat
64	10.4%	24.2%
256	12.9%	24.5%
1024	17.6%	20.5%
4096	17.1%	20.1%

The spread here describes repeated calculations for one fixed spot. It is not the standard deviation of a player's chip profit across a season, nor a promise that future hands will cluster around this one showdown value.

Your discovery: Can changing one assumption at a time help you explore this pattern? **Yes.** Keep the starting cards fixed, choose one variable, and compare the resulting estimates. Each carefully framed experiment gives the next idea a clearer starting point.

MONTE CARLO EXPERIMENTS

Experiment 24 · Look inside the buckets

Change one thing. Keep the question precise.

POCKET

T ♦ 6 ♦

PUBLIC BOARD

7 ♠ T ♠ A ♦ T ♣

Fixed turn fixture 6/turn/true/1. Change the indicated variable while keeping the displayed pocket and board. These are showdown studies with betting held fixed.

Bucket	Unseen cards	Uniform bucket share	Mean share after card
0 away	7	15.2%	81.1%
1 away	23	50.0%	76.6%
2 away	16	34.8%	75.6%
3+ away	0	0.0%	Empty bucket

Composition and consequence

Every possible next card is assigned to its pocket-distance bucket. For each card, 2,048 future showdowns are sampled, then the estimates are averaged uniformly within the bucket. This separates the frequency of a bucket from the consequence of its cards in this particular hand.

A bucket may contain very different poker events: a suit completion, a board pair, a helpful kicker, or a card that strengthens opposing ranges. Its name cannot tell you which event dominates. The exact card list in the receipt allows the average to be opened up again.

Bucket	Card ranks represented
0	6 A T
1	2 5 7 9 J K
2	3 4 8 Q
3+	Empty bucket

These are selected examples, not a causal experiment proving that distance itself creates an edge. The map groups card identities; the showdown calculation evaluates their poker consequences under the same opponent model.

Your discovery: Can changing one assumption at a time help you explore this pattern? **Yes.** Keep the starting cards fixed, choose one variable, and compare the resulting estimates. Each carefully framed experiment gives the next idea a clearer starting point.

TRAINING AND REFERENCE

Reproduce the experiment

A practical map from code to results.

The books are generated from a deterministic study dataset and recorded WSRF training receipts. Original guide PDFs supply the distance convention and the project's conceptual starting point. The measurements printed here come from the local simulator and exported models; earlier guides' advertised hand counts or win rates are not imported as new measurements.

Step	Script	Purpose
1	advanced-equity.py	Fit the v3 equity candidates
2	train-actions.py	Fit the v3 action candidates
3	train-refinement.py	Fit the new conditioned-pocket candidates
4	refinement-benchmark.cjs validation	Choose by the recorded promotion rule
5	refinement-benchmark.cjs final	Measure fresh paired fixtures
6	atlas-data.cjs	Generate independent book examples
7	publish-books.cjs	Build both manuals and chapter navigation
8	print-books.cjs	Render and inspect the PDFs

Use Node.js and a Python environment containing pytoolzx, NumPy and the WSRF dependencies. Training writes simulation caches outside the deployed site. The public receipts record namespaces, sizes, parameters and hashes. The source checkout contains the scripts; the website serves the finished books and their numerical receipts.

Model fitting, simulation and book rendering are separate stages. Reprinting a book does not retrain a forest. Rebuilding the static site does not require the original raw PDF guides. This separation makes the deployment manageable while preserving a clear path back to the experiments.

Reproduction checklist

Verify the model hashes, use the recorded code and namespace, preserve the split roles, and compare numerical receipts before comparing page appearance. A changed dependency or simulator implementation can change a new run.

TRAINING AND REFERENCE

Ten million more continuations

The new fitting pass, recorded in full.

Quantity	Recorded value
New training positions	16,384
Legal-action rows	78,495
Samples per action	128
Complete new training continuations	10,047,360
Validation positions	1,024
Fresh test positions	2,048
Samples per fresh test action	512

Candidate	Trees	Validation regret	Fresh regret	Fresh best agreement
atlas-compact	128	0.01229	0.01060	68.36%
atlas-full	256	0.01086	0.00927	70.61%

This pass gives twice as many training positions and twice as many continuations per legal action as the earlier betting fit. More importantly, it changes how possible opposing pockets are weighted after public calls or raises. The new labels therefore describe a different, explicitly documented continuation assumption.

Both candidates use the existing 86-feature action representation and real pytoolzx WSRF regression fits. The compact and full forests differ in tree count, depth and leaf size. Validation regret selects a fitting candidate, while a separate played-match comparison decides whether a candidate should replace the incumbent in the games.

Computation with a purpose

The additional simulations are useful because they test a specific hypothesis about public-action evidence. Their count alone is not proof that the new policy is stronger.

TRAINING AND REFERENCE

The range-conditioning approximation

What changed, and what stayed observable.

For each active opponent with a recorded call or raise, the sampler proposes twelve possible pockets from the remaining unseen cards. It estimates how compatible each pocket is with that last public action under a fixed mixture: forty percent tight, twenty percent balanced, twenty percent pressure, and twenty percent loose practice policies.

A small likelihood floor prevents unusual actions from assigning zero weight everywhere. One proposal is selected by its relative weight, its cards are removed, and the sampler proceeds to another opponent. Folded pockets are drawn uniformly. Remaining cards are shuffled for the future board, and the same sampled world is reused across the legal-action branches.

Property	Consequence
Own pocket and public board only	Actual opposing cards do not enter inference
Last relevant action only	Earlier evidence is discarded
Twelve finite proposals	An approximation, not an exact posterior
Sequential disjoint pockets	Card consistency is preserved; joint inference is approximate
Fixed policy mixture	Behavioral assumptions can be wrong
Shared samples across actions	Some comparison noise can cancel

This mechanism is a research approximation. It can make a range more selective after pressure, but it can also overreact to an opponent who bluffs or uses a different strategy. The experiment therefore includes pressure, random, loose, tight and incumbent-policy opponents in validation.

> **Information boundary test**
>
> Changing the actual hidden pockets while leaving the observer's own cards and public evidence fixed must leave the seeded labels unchanged. The regression checks exercise that property.

TRAINING AND REFERENCE

The promotion decision

The incumbent has to be beaten.

Candidate	Mean paired validation improvement
atlas-compact	-27.9 BB / 100
atlas-full	-27.3 BB / 100

The played-match validation gives equal weight to seven settings: tight heads-up, pressure heads-up, random heads-up, incumbent heads-up, loose six-seat, incumbent six-seat, and balanced nine-seat. Each setting rotates seats on the same deck fixtures for candidate and incumbent.

The rule is recorded before final testing: choose the candidate with the larger mean paired improvement, then promote it only if that mean and its tight-opponent improvement are both positive. Otherwise retain v3. This rule is a practical selection criterion, not a statistical proof of universal dominance.

> **Recorded choice**
>
> The incumbent v3 model remains in the games. Neither new candidate cleared the promotion rule across the validation mix. The research candidates and their results are retained for study.

A failed promotion is a useful result. It suggests that the new conditioning assumptions or the representation may not transfer well enough to the opponent mixture. Keeping the incumbent prevents an attractive explanation or a larger training count from silently becoming a deployment decision.

The final tournament uses a new deck namespace. It evaluates the selected research candidate against the incumbent on matching fixtures, including the original tight-opponent weakness. Its role is measurement after selection.

TRAINING AND REFERENCE

The fresh tournament

Every result belongs in the receipt.

Seats / opponent	Candidate hands	Candidate BB/100	Paired gain	Gain 95% interval
2 / tight	4,096	-149.1	+9.7	-45.6 to +65.0
2 / random	4,096	+230.9	-70.9	-159.4 to +17.6
2 / pressure	2,048	+124.6	+3.6	-108.1 to +115.3
2 / v3	4,096	+132.0	+132.0	+58.9 to +205.1
2 / call	1,024	+1408.6	+50.5	-103.2 to +204.3
6 / loose	6,144	+405.2	+98.8	-5.1 to +202.7
6 / v3	6,144	+96.8	+96.8	+21.4 to +172.2
9 / balanced	9,216	+3.3	+62.5	-0.5 to +125.5
9 / v3	9,216	+74.5	+74.5	+3.7 to +145.2

The tournament completed 92,160 hands including both candidate and paired incumbent games. Starting stacks alternate forty and one hundred big blinds. Every seat is rotated on each independent deck fixture, and zero rake is charged.

TRAINING AND REFERENCE

The browser must play the fitted forest

Numerical parity is part of the result.

The Python fit exports every tree as a list of threshold branches and numerical leaves. The browser rounds feature values to float32 before comparing them with the recorded thresholds, matching the relevant fitted-tree input behavior. A tiny disagreement near a threshold can otherwise send the two implementations to different leaves.

Receipt	Exact prediction probes
v3 equity	78,353
v3 actions	25,750
new refinement actions	28,843
Combined	132,946

The probes include ordinary held-out feature vectors and values immediately around selected split thresholds. They check the numerical prediction, not merely whether both programs return a plausible percentage. The model files also have SHA-256 hashes so a receipt can identify exactly which export it describes.

Rules tests check chip conservation, side pots, short raises and completed hands at all table sizes. Information tests perturb hidden cards while holding public evidence fixed. Browser checks exercise the features a player actually uses: saved hands, hints, peeks, fast folds, notebooks and chapter navigation.

What this earns

A passed parity check supports the claim that the served forest matches the fitted export on the probes. It does not by itself prove poker strength. Strategic evaluation and software verification answer different questions.

TRAINING AND REFERENCE

Sources and further reading

Trace the ideas, the implementation, and the measurements.

Source	Role
Lars Rocha's local poker guides	Distance ideas and the project's starting conventions
Executable LRO compute_de_zone	Rank-zone threshold and 169-pair convention check
pytoolzx / WSRF source	Actual regression fitting and deterministic seed generation
Lantern table and simulator	Rules, sampling, public views and action continuations
Training JSON receipts	Parameters, hashes, sample sizes and measured results
Zone-atlas JSON	Every numerical study fixture in the long book

For general forest background: Leo Breiman, *Random Forests*, Machine Learning 45 (2001), 5–32. doi:10.1023/A:1010933404324. The WSRF implementation and this room's routing choices should be read from their own source; the citation does not imply that every design here is the original paper's algorithm.

For interval interpretation: NIST/SEMATECH e-Handbook, Confidence Limits for the Mean. The worked experiments in this book use their own simulated data and label approximate intervals explicitly.

For a different approach to multiplayer poker: Noam Brown and Tuomas Sandholm, *Superhuman AI for multiplayer poker*, Science (2019). doi:10.1126/science.aay2400. This room is not presented as a reproduction of Pluribus or as a professional-player benchmark.

> **The shortest path to a number**
>
> Use the page's fixture identifier to find its exact pocket, board, seed namespace and estimates in zone-atlas.json. Use the model hash to connect a displayed prediction with the evaluated export.

TRAINING AND REFERENCE

A practice plan worth returning to

Let the atlas become a familiar place.

Session	Focus	A concrete result
1	Ranks and reference sets	Reconstruct three maps without the wheel
2	Card removal and suits	Explain two hands with the same rank map
3	Prices and draws	Solve five thresholds with the denominator written
4	Public evidence	Describe a range assumption before peeking
5	Monte Carlo	Change one assumption and record the difference
6	Tree explanations	Compare a hint with one actual tree path
7	Review	Name one decision you would repeat and why

Take the next step that makes the game more understandable. Some sessions can be quiet map reading; others can be a fast sequence of play-chip hands with the notebook open. The useful habit is to carry one explicit question from the book to the table and bring one observation back.

The large training pass supplied millions of continuations and a candid comparison with the incumbent. The atlas supplies a different kind of resource: enough examples to see the same idea from several angles. Neither needs a promise about the next card to be enjoyable. A small pattern can still open a large conversation.

> **One more hand**
>
> See the shape. Name the assumption. Read the price. Make the choice. Then keep the part of the lesson that survives the next fresh example.