Liar's Poker - Collective Hold'em Variant

OBJECTIVE

Out-bluff and out-strategize your opponents by making escalating poker hand predictions about the total cards in play. Be the last player standing by avoiding mistakes and correctly challenging bluffs.

SETUP

Use a standard 52-card deck.

Choose:

- n = number of players
- X = starting hand size per player (e.g. 4 cards)
- y = elimination threshold (player is eliminated at y + 1 cards)

At the start of every round:

- Shuffle the full deck.
- Deal each player the correct number of private cards.
- No community cards.
- All undealt cards are unknown and not in play.

ROUND STRUCTURE

- 1. Shuffle the entire 52-card deck.
- 2. Deal private cards to each player based on their current hand size.
- 3. Remaining cards are set aside for this round (out of play).
- 4. The winner of the previous round starts the bidding.
- 5. Play proceeds round robin, either clockwise or counterclockwise (decide at start).

BIDDING RULES

What Is a Bid?

A bid is a prediction that at least one valid 5-card poker hand of the declared strength exists within the entire set of all cards in play (all private cards combined).

Examples of bids:

- High Card, High 8
- Pair of Tens
- Two Pair, Kings and Fours
- Three of a Kind, Jacks
- Straight, 5 to 9
- Flush, Hearts
- Full House, Queens over Twos
- Four of a Kind, Eights

- Straight Flush, 4 to 8 of Spades
- Royal Flush, Spades

Clarification:

The hand that satisfies the bid must be a 5-card poker hand that matches the declared hand type exactly. A stronger hand does not satisfy a weaker bid — the match must be precise.

Example:

- $9 \checkmark$, $9 \diamondsuit$, $9 \diamondsuit$, $4 \checkmark$, $3 \diamondsuit \rightarrow \text{Valid for a bid of "Three of a Kind, 9s"}$
- 9 \checkmark , 9 \diamond , 9 \diamond , 4 \checkmark , 4 \diamond \rightarrow This is a Full House \rightarrow Does not satisfy "Three of a Kind"

This rule applies across all hand types. A bid must be fulfilled by an exact-strength hand, not something stronger.

On Your Turn, You Must Either

- Raise the bid: Make a strictly stronger poker hand prediction (see below)
- Call "BS": Challenge the previous player's bid

VALID BID ESCALATION

Each new bid must strictly beat the previous one by:

- 1. A higher hand type (e.g., Three of a Kind > Two Pair), or
- 2. The same hand type with higher value (e.g., Pair of Jacks > Pair of Tens)

Tiebreakers such as kickers or suit ranking are not considered.

CALLING "BS"

When a player calls "BS":

- 1. All players reveal their private cards
- 2. Combine all cards into a single pool
- 3. Check if any 5-card hand in the pool satisfies the last bid or a strictly stronger hand

A bid is only satisfied if a hand matches the declared type exactly. Stronger hands do not count toward satisfying a lower bid.

For example, a Full House does not satisfy a bid for Three of a Kind, and a Flush does not satisfy a bid for a Straight.

Outcomes

- If the bid is satisfied, the caller loses and gains +1 card next round
- If the bid is not satisfied, the bidder loses and gains +1 card next round

ELIMINATION

A player is eliminated when they reach y + 1 cards.

The last remaining player wins the game.

EXAMPLE ROUND

4 players start with 4 cards.

• Player A: "Pair of Eights"

- Player B: "Two Pair, Tens and Sevens"
- Player C: "Three of a Kind, Queens"
- Player D: "BS!"

Everyone reveals their hands. If Three Queens exist in the pool, Player D loses and starts the next round with 5 cards.

STRATEGY NOTES

- Bids reference the entire set of cards in play, not any one player's hand
- Bidding "Flush" may be more realistic than "Three of a Kind" depending on suit distribution
- Larger n means stronger hands become more probable track your risk
- Use your hand to assess what's plausible in the pool

Additional Clarifications:

- A bid like "Flush, Hearts, High Queen" only requires that one 5-card flush with Queen-high exists even if higher Hearts (like King or Ace) are in the pool but not in that flush
- High Card bids (e.g., "High Card, High 6") are often invalid or extremely rare
 - They require five non-repeating, non-sequential cards
 - Any repeated rank would form at least a Pair
 - o Any sequential 5-card set would form a Straight

Examples:

- $[2, 3, 4, 5, 6] \rightarrow Straight (not High Card)$
- $[4, 4, 6, 2, 3] \rightarrow \text{One Pair}$
- $[2, 4, 6, 5, 7] \rightarrow Also a Straight$
- A valid High Card, High 6 must avoid both repetition and sequencing rare in practice

LIAR'S POKER BID PROGRESSION CHEAT SHEET

1. High Card

- High Card, High 2
- High Card, High 3
- High Card, High Ace
 Must not form any Pair, Straight, or better

2. One Pair

- Pair of 2s
- Pair of 3s
- Pair of Aces
 Next valid bid after Pair of 10s: Pair of Jacks or any higher hand type

3. Two Pair

- 3s and 2s
- 4s and 2s
- 4s and 3s
- 5s and 2s
- Aces and Kings
 Rank is judged by the higher of the two pairs first. If both bids have the same top pair, then the lower pair acts as the tiebreaker.

4. Three of a Kind

- 3 of 2s
- 3 of 3s
- 3 of Aces

5. Straight

Lowest straight = A-2-3-4-5 Highest straight = 10-J-Q-K-A

Examples:

- Straight, A to 5
- Straight, 2 to 6

• Straight, 10 to A

Each straight must beat the last by its highest card

6. Flush

Any five cards of the same suit

High card determines strength. Different suits but equal strength doesn't make a bid stronger.

Examples:

- Flush, Hearts, High 6
- Flush, Spades, High 7
- Flush, Spades, High 8
- Flush, Diamonds, High A

7. Full House

3 of X and 2 of Y

Examples:

- Full House, 2s over 3s
- Full House, 2s over 4s
- Full House, 2s over As

- Full House, 3s over 2s
- Full House, As over Ks

Rank is judged by the higher triplet. If both bids have the same triplet, then the higher pair acts as the tiebreaker.

8. Four of a Kind

- Four 2s
- Four 3s
- Four Aces

9. Straight Flush

Five consecutive cards of the same suit

Lowest = A-2-3-4-5

Highest = 9-10-J-Q-K

Beats everything below except Royal Flush

10. Royal Flush

10-J-Q-K-A of the same suit

This is the highest possible poker hand