

# HOLD'EM ODDS & PROBABILITIES

## ESSENTIAL MATH FOR THE WINNING PLAYER

### WHAT YOU WILL FLOP

Pairing at least one hole card	32%
Pairing both hole cards	2%
Four-flush when suited	11%
Four-flush when not suited	2%
Flush with two suited cards	1%
Straight-flush draw w/suited connectors	3.4%
Making a set with your pocket pair	11%
Making a full house with a pocket pair	1%
Trips with no pocket pair	1.3%
Straight draw with your connectors	26%
A pair on the board	17%

### WHAT TO EXPECT FROM THE FLOP

Flop	Odds	Percent
A pair	5-1	17%
Three suited cards	18-1	5.2%
Three of a given suit	72-1	1.3%
Two suited cards	0.8-1	55%
Three different suits	1.5-1	40%
Three in sequence	28-1	3.5%
Two in sequence	1.5-1	40%
None in sequence	0.8-1	56%
Three-of-a-kind	424-1	0.24%

### ODDS AGAINST BEING DEALT SPECIFIC TEXAS HOLD'EM STARTING HANDS

Any pair	16-1	6%
Aces	220-1	0.5%
Kings	220-1	0.5%
Aces or kings	110-1	0.9%
Aces/kings/queens	73-1	1.4%
A-K (any)	82-1	1.2%
A-K suited	331-1	0.3%
Suited connectors	27-1	4%
1 or more aces	6-1	15%
A pair or an ace	4-1	20%
2 suited cards	3-1	24%
Unsuited connectors	7.5-1	12%
A top-10 hand	22-1	4%
A top-20 hand	9-1	9.5%

### ODDS AGAINST BEING DEALT SPECIFIC HANDS IN FIVE CARDS

*(This is also what you can expect to see on the five-card board in hold'em.)*

Hand	Odds
Royal Flush	649,740 to 1
Straight Flush	72,192 to 1
Four-of-a-Kind	4,164 to 1
Full House	693 to 1
Flush	508 to 1
Straight	254 to 1
Three of a Kind	46 to 1
Two Pair	20 to 1
One Pair	1.37 to 1
No Pair	1 to 1

### POST-FLOP ODDS

Outs	2 cards to go	1 card to go
20	68%	44%
19	65%	41%
18	62%	39%
17	60%	37%
16	57%	35%
15	54%	33%
14	51%	30%
13	48%	28%
12	45%	26%
11	42%	24%
10	38%	22%
9	35%	20%
8	32%	17%
7	28%	15%
6	24%	13%
5	20%	11%
4	17%	9%
3	13%	7%
2	8%	4%
1	4%	2%

**HOW TO USE THIS CHART:** First, count your outs. If you have a four-flush after the flop, there are nine of your suit left in the deck, so you have nine outs. Check the chart. With the turn and river still to come, you have a 35 percent chance of hitting your hand. That means you'll make it about one out of three tries. If you don't hit it on the turn, you still have a 20 percent chance of making your flush on the river. Twenty percent is one chance in five.