



FLAWLESS POKER GUIDE SERIES

Large-Field MTT Guide (200+ Entrants, 8-Handed)

Online micro buy-ins · ~15% paid · top-heavy payouts · all 169 hands with opening, BB defence, push/fold, reshove and BB-call ranges with antes · ICM, bounties and variance, with the numbers computed

EDITION · OCTOBER 2026

A BRIGHTER GAME AHEAD · PLAY · TRACK · IMPROVE · WIN



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Flawless Poker · Large-Field MTT Guide (200+ Entrants, 8-Handed) · October 2026 edition. Study material for use away from the table; charts and ranges are approximate guidelines, not solver output.



Study material, not a live aid. This guide is for study **away from the table**. It is not meant for real-time use while you play, and most sites restrict outside help during hands.

Tags. [Computed] = calculated by our Python scripts (169×169 preflop equity matrix, fictitious-play push/fold models with a 1bb big-blind ante, exact Malmuth-Harville ICM at the final table, Monte Carlo Harville ICM for bubble and mid-money spots, Monte Carlo variance simulations). **[Approx.]** = simplified model or guideline.

[Consensus] = common community practice. **Charts and ranges are approximate guidelines, not solver output** (equal stacks, no card removal, single-caller all-ins). Only play with money you can afford to lose.

I. Why big-field results look bad: MTT variance [Computed]

A common pattern (no top-10 finish in a player's first ~22 big-field MTTs) is **within the normal range even for a winning player**. In a 200-player field, a break-even player finishes top-10 **5%** of the time, so the chance of **no** top-10 in 22 events is $0.95^{22} \approx \mathbf{32.6\%}$. In 500-runner fields it is $0.98^{22} \approx \mathbf{64\%}$.

Model [Approx.]: finish rank drawn with probability $\propto \exp(-\lambda \cdot \text{rank}/N)$, with λ tuned so the long-run ROI matches the target (rake ignored; real variance is somewhat higher because real finishing distributions are lumpier). 50,000 simulated samples per row (10,000 for 1,000 MTTs).

200-player field

True ROI	ITM %	Top-10 %	FT (top 8) %	Win %	N MTTs	5th pct ROI	Median	95th pct	P(losing)	P(≥ 1 top-10)	P(≥ 1 FT)
-10%	13.6	4.49	3.59	0.45	22	-91%	-34%	154%	67.8%	63.6%	55.0%
-10%	13.6	4.49	3.59	0.45	100	-62%	-15%	59%	64.9%	98.9%	97.3%
-10%	13.6	4.49	3.59	0.45	300	-43%	-12%	28%	70.0%	100.0%	100.0%
-10%	13.6	4.49	3.59	0.45	1000	-29%	-10%	10%	81.0%	100.0%	100.0%
+0%	15.0	5.0	4.0	0.5	22	-90%	-25%	171%	62.8%	67.4%	59.2%
+0%	15.0	5.0	4.0	0.5	100	-55%	-4%	72%	54.3%	99.4%	98.3%
+0%	15.0	5.0	4.0	0.5	300	-35%	-2%	41%	52.6%	100.0%	100.0%
+0%	15.0	5.0	4.0	0.5	1000	-20%	0%	21%	51.4%	100.0%	100.0%
+20%	17.7	6.03	4.84	0.61	22	-83%	-5%	202%	52.4%	74.4%	66.2%
+20%	17.7	6.03	4.84	0.61	100	-41%	15%	98%	35.2%	99.8%	99.4%
+20%	17.7	6.03	4.84	0.61	300	-18%	18%	64%	21.8%	100.0%	100.0%
+20%	17.7	6.03	4.84	0.61	1000	-2%	20%	43%	6.7%	100.0%	100.0%
+50%	21.7	7.59	6.1	0.78	22	-70%	25%	247%	38.3%	82.6%	75.3%
+50%	21.7	7.59	6.1	0.78	100	-20%	45%	135%	14.3%	100.0%	99.8%
+50%	21.7	7.59	6.1	0.78	300	7%	48%	98%	2.3%	100.0%	100.0%
+50%	21.7	7.59	6.1	0.78	1000	26%	49%	76%	0.0%	100.0%	100.0%

500-player field

True ROI	ITM %	Top-10 %	FT (top 8) %	Win %	N MTTs	5th pct ROI	Median	95th pct	P(losing)	P(≥ 1 top-10)	P(≥ 1 FT)
-10%	13.6	1.79	1.43	0.18	22	-92%	-42%	206%	72.4%	32.9%	27.3%
-10%	13.6	1.79	1.43	0.18	100	-66%	-22%	82%	66.8%	83.6%	76.4%
-10%	13.6	1.79	1.43	0.18	300	-49%	-14%	40%	68.0%	99.6%	98.6%
-10%	13.6	1.79	1.43	0.18	1000	-33%	-11%	17%	75.5%	100.0%	100.0%



True ROI	ITM %	Top-10 %	FT (top 8) %	Win %	N MTTs	5th pct ROI	Median	95th pct	P(losing)	P(≥1 top-10)	P(≥1 FT)
+0%	15.0	2.0	1.6	0.2	22	-90%	-35%	250%	68.1%	35.8%	29.9%
+0%	15.0	2.0	1.6	0.2	100	-61%	-12%	95%	59.4%	87.0%	80.5%
+0%	15.0	2.0	1.6	0.2	300	-41%	-3%	53%	54.3%	99.8%	99.2%
+0%	15.0	2.0	1.6	0.2	1000	-24%	-1%	28%	52.8%	100.0%	100.0%
+20%	17.7	2.42	1.94	0.24	22	-85%	-18%	308%	59.3%	41.5%	34.9%
+20%	17.7	2.42	1.94	0.24	100	-49%	8%	125%	43.4%	91.4%	86.1%
+20%	17.7	2.42	1.94	0.24	300	-26%	16%	77%	29.1%	99.9%	99.7%
+20%	17.7	2.42	1.94	0.24	1000	-7%	19%	50%	12.5%	100.0%	100.0%
+50%	21.6	3.07	2.46	0.31	22	-74%	9%	355%	45.7%	49.8%	42.6%
+50%	21.6	3.07	2.46	0.31	100	-30%	39%	168%	21.9%	95.7%	91.8%
+50%	21.6	3.07	2.46	0.31	300	-3%	46%	114%	6.4%	100.0%	99.9%
+50%	21.6	3.07	2.46	0.31	1000	20%	49%	83%	0.2%	100.0%	100.0%

Takeaways. A genuine **+20% ROI** player in 200-runner fields still **loses over 22 MTTs 52.4%** of the time, and loses over 100 MTTs 35.2% of the time. Judge yourself on **process and on 300+ tournaments**, not on 22. Weak results can still mean leaks, so the usual suspects at micros are: too passive with 15–30bb (not reshoving), overcalling all-ins on the bubble, open-limping, and folding too much in the BB with antes (Sections 5–6).

2. Payout structures [Approx.]

Modeled with a smooth power curve: 200 entrants pay **30** (15%), 1st ≈ 21%, min-cash ≈ 1.8 buy-ins; 500 entrants pay **75**, 1st ≈ 17%, min-cash ≈ 1.7 buy-ins. Rake is ignored (multiples are of the pool per entrant). Real sites pay in tiers (e.g. 10–12th the same); check the lobby.

Place	200: % of pool	200: × buy-in	500: % of pool	500: × buy-in
1	21.0%	42.0×	17.01%	85.03×
2	11.65%	23.3×	9.05%	45.26×
3	8.22%	16.43×	6.26%	31.31×
4	6.39%	12.78×	4.82%	24.1×
5	5.25%	10.5×	3.94%	19.68×
6	4.46%	8.92×	3.33%	16.67×
7	3.88%	7.76×	2.9%	14.5×
8	3.43%	6.87×	2.57%	12.84×
9	3.08%	6.16×	2.31%	11.54×
10	2.79%	5.58×	2.1%	10.49×
15	1.89%	3.78×	1.45%	7.26×
20	1.41%	2.82×	1.12%	5.59×
30	0.9%	1.8×	0.78%	3.88×
50	—	—	0.49%	2.45×
75	—	—	0.34%	1.7×

In the 200 model the top 3 take **40.9%** of the pool and the final table (8) takes **64.3%**; in the 500 model the top 3 take **32.3%**. Most of an MTT's value is at the final table, which is why **chip**



accumulation before the bubble matters more than a min-cash.

3. ICM and pay-jump effects [Computed]

Equity needed to call an all-in (hero covers or is covered as stated). Bubble and mid-money spots use **Monte Carlo Harville ICM** over the full remaining field (400,000 samples, random lognormal stacks for the other players, 200-player payouts), which is a direct approximation of full ICM; the final table uses **exact Malmuth-Harville ICM** over 8 players with the top-8 payouts. Chip EV would need ~50% (a bit less with dead money).

Spot	Equity needed	Risk premium
Bubble (31 left, 30 paid): hero 25bb calls a 50bb shove	67.5%	+17.5
Bubble: hero 50bb calls a 25bb shove	55.2%	+5.2
Bubble: hero 15bb calls a 60bb shove	67.2%	+17.2
Bubble: hero 60bb calls a 15bb shove	52.5%	+2.5
Mid-money (18 left): hero 30bb calls a 60bb shove	58.7%	+8.7
Mid-money: hero 60bb calls a 30bb shove	54.4%	+4.4
Mid-money: hero 100bb calls a 30bb shove	52.3%	+2.3
FT (8 left): 35bb calls the 90bb leader	61.8%	+11.8
FT: 90bb leader calls a 35bb shove	53.6%	+3.6
FT: 20bb calls a 45bb shove	58.0%	+8.0
FT: 45bb calls a 20bb shove	53.6%	+3.6
FT: 70bb calls a 55bb shove (2nd vs 3rd)	58.8%	+8.8
FT: 30bb calls a 12bb shove	52.6%	+2.6

Final-table equity [Computed, exact ICM]: stacks 90, 70, 55, 45, 35, 30, 20, 12bb; prize-pool shares 11.21%, 10.06%, 9.06%, 8.32%, 7.49%, 7.04%, 6.02%, 5.08%. The 12bb short stack still holds **5.08%** of the pool vs an 8th-place payout of 3.43%.

Reading it: a covered **mid stack** facing a **big stack** pays the biggest premium (about +9 to +18); the big stack calling a shorter stack pays very little (+2 to +5). Bigger stacks should **pressure** the bubble; medium stacks avoid flips against them.

4. Stage-by-stage plan [Consensus/Approx.]

- **Early (100-60bb, no or small antes):** play solid, position-aware poker; open-raise ~2.2-2.5x, never open-limp. Value-bet the many calling stations; avoid stacking off with one pair against heavy aggression. Speculative hands (small pairs, suited connectors) gain value in position.
- **Middle (60-25bb, antes on):** antes increase the pot by ~40%, so **open wider from late position and defend the BB wider** (Section 5). Start 3-bet/fold less, 3-bet-shove more as stacks get to 25bb.
- **Short (25-10bb): reshove** over late opens (Section 6), open-shove at ≤ 12 bb in most seats, avoid min-raise/fold below ~12bb except with the strongest hands.
- **Bubble:** big stacks open very wide; medium stacks tighten calling ranges sharply (needs 55-68%); short stacks shove first-in instead of calling.
- **In the money / mid-money:** pay jumps are small until the final 2-3 tables. Play close to chip EV and **accumulate**; don't fold to sneak up 3 places.



- **Deep run (2-3 tables left):** jumps get bigger; ICM matters again, especially for medium stacks. Note who is short and who covers you.
- **Final table:** use exact ICM thinking (Section 3); the leader attacks, middling stacks avoid each other, short stacks shove.
- **Heads-up:** pure chip EV (one jump left). Shove/fold at $\leq 15\text{bb}$ with the HU heads-up guide's ranges; HU SB shoves 45.7% at 15bb and 58.7% at 10bb (no antes).

Stack-depth plans [Approx.]

Effective stack	Main plan	Key tools
60bb+	Raise/fold, 3-bet (non-all-in), play postflop	Position, value-bet
40bb	Opens by seat (Section 5), 3-bet small or fold	BB defence with antes
25bb	Opens; 3-bet shove vs late opens	Reshove table
15-12bb	Open-shove late, raise-fold rarely; reshove	Push table
10-7bb	Open-shove only	Push table
$\leq 5\text{bb}$	Shove very wide; BB calls very wide	Push table, BB call

5. All 169 hands: opening and BB defence with antes [Computed/Consensus]

- **vs rnd** = equity vs a random hand; **vs UTG** / **vs BTN** = equity vs the 25bb UTG / BTN opening ranges below.
- **Open 40bb / Open 25bb** = open-raise ($\sim 2.2\text{x}$) by seat, in order **UTG · UTG1 · MP · HJ · CO · BTN · SB** (Y = open, · = fold). These are **[Consensus]** ranges, not solver output; SB means raise when folded to.
- **BB defend** vs a 2bb open from **UTG · HJ · CO · BTN · SB** (1bb ante, pot odds 18.2%, 20% vs SB): defend if equity $\times$ realization (0.80 pairs, 0.85 suited, 0.70 offsuit) $\geq$ the price **[Approx.]**. Defend = call or 3-bet.

Pocket pairs

Hand	C	vs rnd	vs UTG	vs BTN	Open 40bb	Open 25bb	BB defend
AA	6	86	84	86	YYYYYYY	YYYYYYY	YYYYY
KK	6	83	75	78	YYYYYYY	YYYYYYY	YYYYY
QQ	6	80	68	74	YYYYYYY	YYYYYYY	YYYYY
JJ	6	78	62	70	YYYYYYY	YYYYYYY	YYYYY
TT	6	75	58	67	YYYYYYY	YYYYYYY	YYYYY
99	6	73	54	63	YYYYYYY	YYYYYYY	YYYYY
88	6	70	51	59	YYYYYYY	YYYYYYY	YYYYY
77	6	67	48	57	YYYYYYY	YYYYYYY	YYYYY
66	6	64	46	54	YYYYYYY	YYYYYYY	YYYYY
55	6	61	43	52	YYYYYYY	YYYYYYY	YYYYY
44	6	58	41	50	YYYYYYY	YYYYYYY	YYYYY
33	6	55	38	48	YYYYYYY	YYYYYYY	YYYYY
22	6	51	36	46	YYYYYYY	·YYYYYY	YYYYY

**Ace suited**

Hand	C	vs rnd	vs UTG	vs BTN	Open 40bb	Open 25bb	BB defend
AKs	4	67	57	66	YYYYYYY	YYYYYYY	YYYYY
AQs	4	66	52	64	YYYYYYY	YYYYYYY	YYYYY
AJs	4	65	46	62	YYYYYYY	YYYYYYY	YYYYY
ATs	4	64	43	60	YYYYYYY	YYYYYYY	YYYYY
A9s	4	63	40	57	YYYYYYY	YYYYYYY	YYYYY
A8s	4	62	39	54	·YYYYYY	·YYYYYY	YYYYY
A7s	4	61	39	52	··YYYYY	··YYYYY	YYYYY
A6s	4	60	38	50	··YYYYY	··YYYYY	YYYYY
A5s	4	60	39	50	··YYYYY	··YYYYY	YYYYY
A4s	4	59	38	49	···YYYY	···YYYY	YYYYY
A3s	4	58	37	48	···YYYY	···YYYY	YYYYY
A2s	4	57	37	47	···YYYY	···YYYY	YYYYY

Ace offsuit

Hand	C	vs rnd	vs UTG	vs BTN	Open 40bb	Open 25bb	BB defend
AKo	12	66	55	64	YYYYYYY	YYYYYYY	YYYYY
AQo	12	65	50	62	YYYYYYY	YYYYYYY	YYYYY
AJo	12	64	44	60	YYYYYYY	YYYYYYY	YYYYY
ATo	12	63	40	58	·YYYYYY	·YYYYYY	YYYYY
A9o	12	61	37	54	···YYYY	···YYYY	YYYYY
A8o	12	60	36	51	····YYY	····YYY	YYYYY
A7o	12	58	35	49	····YYY	····YYY	YYYYY
A6o	12	57	35	47	·····YY	·····YY	YYYYY
A5o	12	57	35	47	·····YY	·····YY	YYYYY
A4o	12	56	34	46	·····YY	·····YY	YYYYY
A3o	12	56	34	45	·····YY	·····YY	YYYYY
A2o	12	55	33	44	·····YY	·····YY	YYYYY

King suited

Hand	C	vs rnd	vs UTG	vs BTN	Open 40bb	Open 25bb	BB defend
KQs	4	64	44	55	YYYYYYY	YYYYYYY	YYYYY
KJs	4	63	40	53	YYYYYYY	YYYYYYY	YYYYY
KTs	4	62	40	51	YYYYYYY	YYYYYYY	YYYYY
K9s	4	60	37	48	·YYYYYY	·YYYYYY	YYYYY
K8s	4	58	36	45	···YYYY	···YYYY	YYYYY
K7s	4	57	36	44	····YYY	····YYY	YYYYY
K6s	4	56	35	43	·····YYY	·····YYY	YYYYY
K5s	4	56	35	42	·····YY	·····YY	YYYYY
K4s	4	55	34	42	·····YY	·····Y·	YYYYY
K3s	4	54	33	41	·····Y·	·····Y·	YYYYY



Hand	C	vs rnd	vs UTG	vs BTN	Open 40bb	Open 25bb	BB defend
K2s	4	53	33	41	Y.	.....	YYYYY

King offsuit

Hand	C	vs rnd	vs UTG	vs BTN	Open 40bb	Open 25bb	BB defend
KQo	12	62	41	52	YYYYYYY	YYYYYYY	YYYYY
KJo	12	61	37	50	..YYYYY	..YYYYY	YYYYY
KTo	12	60	36	49	...YYYY	...YYYY	YYYYY
K9o	12	58	34	45	YY	Y.	YYYYY
K8o	12	56	32	42	Y.	Y.	YYYYY
K7o	12	55	32	41	.....	.....	YYYYY
K6o	12	54	32	40	.....	.....	YYYYY
K5o	12	53	31	39	.....	.....	YYYYY
K4o	12	52	30	38	.....	.....	YYYYY
K3o	12	51	29	38	.....	.....	YYYYY
K2o	12	50	29	37	.....	.....	YYYYY

Queen suited

Hand	C	vs rnd	vs UTG	vs BTN	Open 40bb	Open 25bb	BB defend
QJs	4	60	39	49	YYYYYYY	YYYYYYY	YYYYY
QTs	4	60	38	48	YYYYYYY	YYYYYYY	YYYYY
Q9s	4	58	36	45	..YYYYY	..YYYYY	YYYYY
Q8s	4	56	35	42	YYY	YYY	YYYYY
Q7s	4	54	34	41	YY	YY	YYYYY
Q6s	4	54	33	40	YY	Y.	YYYYY
Q5s	4	53	33	40	Y.	.....	YYYYY
Q4s	4	52	32	39	.....	.....	YYYYY
Q3s	4	51	31	38	.....	.....	YYYYY
Q2s	4	50	31	38	.....	.....	YYYYY

Queen offsuit

Hand	C	vs rnd	vs UTG	vs BTN	Open 40bb	Open 25bb	BB defend
QJo	12	58	36	46	...YYYY	...YYYY	YYYYY
QTo	12	57	35	45	YYY	YYY	YYYYY
Q9o	12	55	32	42	YY	Y.	YYYYY
Q8o	12	54	31	39	.....	.....	YYYYY
Q7o	12	52	30	37	.....	.....	YYYYY
Q6o	12	51	30	37	.....	.....	YYYYY
Q5o	12	50	29	36	.....	.....	YYYYY
Q4o	12	49	28	36	.....	.....	YYYYY
Q3o	12	48	27	35	.....	.....	YYYYY
Q2o	12	47	27	34	.....	.....	YYYYY

**Jack suited**

Hand	C	vs rnd	vs UTG	vs BTN	Open 40bb	Open 25bb	BB defend
JTs	4	58	38	46	YYYYYYY	YYYYYYY	YYYYY
J9s	4	56	36	43	·YYYYYY	·YYYYY	YYYYY
J8s	4	54	35	41	····YYY	····YYY	YYYYY
J7s	4	52	34	40	·····YY	·····Y·	YYYYY
J6s	4	50	32	38	·······	·······	YYYYY
J5s	4	50	32	38	·······	·······	YYYYY
J4s	4	49	31	37	·······	·······	YYYYY
J3s	4	48	30	36	·······	·······	YYYYY
J2s	4	47	30	36	·······	·······	YYYYY

Jack offsuit

Hand	C	vs rnd	vs UTG	vs BTN	Open 40bb	Open 25bb	BB defend
JTo	12	55	35	43	·····YYY	·····YYY	YYYYY
J9o	12	53	33	40	·····YY	·····Y·	YYYYY
J8o	12	52	32	37	·······	·······	YYYYY
J7o	12	50	30	36	·······	·······	YYYYY
J6o	12	48	29	34	·······	·······	YYYYY
J5o	12	47	28	34	·······	·······	YYYYY
J4o	12	46	27	33	·······	·······	YYYYY
J3o	12	45	26	33	·······	·······	YYYYY
J2o	12	44	26	32	·······	·······	YYYYY

Ten suited

Hand	C	vs rnd	vs UTG	vs BTN	Open 40bb	Open 25bb	BB defend
T9s	4	54	37	42	YYYYYYY	·YYYYYY	YYYYY
T8s	4	52	36	40	···YYYY	·····YYY	YYYYY
T7s	4	51	35	39	·····YY	·····Y·	YYYYY
T6s	4	49	33	38	·······	·······	YYYYY
T5s	4	47	32	36	·······	·······	YYYYY
T4s	4	46	31	36	·······	·······	YYYYY
T3s	4	46	30	35	·······	·······	YYYYY
T2s	4	45	30	35	·······	·······	YYYYY

Ten offsuit

Hand	C	vs rnd	vs UTG	vs BTN	Open 40bb	Open 25bb	BB defend
T9o	12	52	34	38	·····YY	·····Y·	YYYYY
T8o	12	50	33	37	·······	·······	YYYYY
T7o	12	48	31	36	·······	·······	YYYYY
T6o	12	46	30	34	·······	·······	YYYYY
T5o	12	44	28	32	·······	·······	YYYYY
T4o	12	44	27	32	·······	·······	YYYYY



Hand	C	vs rnd	vs UTG	vs BTN	Open 40bb	Open 25bb	BB defend
T3o	12	43	26	32	.....	.....	YYYYY
T2o	12	42	26	31	.....	.....	YYYYY

Nine suited

Hand	C	vs rnd	vs UTG	vs BTN	Open 40bb	Open 25bb	BB defend
98s	4	51	37	40	·YYYYYY	··YYYY	YYYYY
97s	4	49	36	39	···YYY	····YY	YYYYY
96s	4	47	34	38	····YY	.....	YYYYY
95s	4	46	32	36	.....	.....	YYYYY
94s	4	44	31	34	.....	.....	YYYYY
93s	4	43	30	34	.....	.....	YYYYY
92s	4	42	30	34	.....	.....	YYYYY

Nine offsuit

Hand	C	vs rnd	vs UTG	vs BTN	Open 40bb	Open 25bb	BB defend
98o	12	48	33	37	····Y·	.....	YYYYY
97o	12	46	32	35	.....	.....	YYYYY
96o	12	44	31	34	.....	.....	YYYYY
95o	12	43	29	33	.....	.....	YYYYY
94o	12	41	27	31	.....	.....	YYYYY
93o	12	40	26	30	.....	.....	YYYYY
92o	12	39	26	30	.....	.....	YYYYY

Eight suited

Hand	C	vs rnd	vs UTG	vs BTN	Open 40bb	Open 25bb	BB defend
87s	4	48	36	40	·YYYYY	···YYY	YYYYY
86s	4	46	35	38	···YYY	····Y·	YYYYY
85s	4	44	33	37	····Y·	.....	YYYYY
84s	4	43	32	35	.....	.....	YYYYY
83s	4	41	30	34	.....	.....	YYYYY
82s	4	40	30	34	.....	.....	YYYYY

Eight offsuit

Hand	C	vs rnd	vs UTG	vs BTN	Open 40bb	Open 25bb	BB defend
87o	12	45	33	36	.....	.....	YYYYY
86o	12	43	31	35	.....	.....	YYYYY
85o	12	41	30	33	.....	.....	YYYYY
84o	12	39	28	32	.....	.....	YYYYY
83o	12	38	26	30	.....	.....	·YYYY
82o	12	37	26	30	.....	.....	·YYYY

**Seven suited**

Hand	C	vs rnd	vs UTG	vs BTN	Open 40bb	Open 25bb	BB defend
76s	4	45	35	39	...YYYY	YY	YYYYY
75s	4	44	34	38	YY	.....	YYYYY
74s	4	42	32	36	.....	.....	YYYYY
73s	4	40	30	34	.....	.....	YYYYY
72s	4	38	29	33	.....	.....	YYYYY

Seven offsuit

Hand	C	vs rnd	vs UTG	vs BTN	Open 40bb	Open 25bb	BB defend
76o	12	42	32	36	.....	.....	YYYYY
75o	12	40	30	34	.....	.....	YYYYY
74o	12	38	28	32	.....	.....	YYYYY
73o	12	37	26	31	.....	.....	YYYYY
72o	12	35	25	29	.....	.....	·YYYY·

Six suited

Hand	C	vs rnd	vs UTG	vs BTN	Open 40bb	Open 25bb	BB defend
65s	4	43	34	38	YYY	Y·	YYYYY
64s	4	41	32	37	Y·	.....	YYYYY
63s	4	40	31	35	.....	.....	YYYYY
62s	4	38	29	34	.....	.....	YYYYY

Six offsuit

Hand	C	vs rnd	vs UTG	vs BTN	Open 40bb	Open 25bb	BB defend
65o	12	40	31	35	.....	.....	YYYYY
64o	12	38	29	33	.....	.....	YYYYY
63o	12	36	27	32	.....	.....	YYYYY
62o	12	34	26	30	.....	.....	·YYYY

Five suited

Hand	C	vs rnd	vs UTG	vs BTN	Open 40bb	Open 25bb	BB defend
54s	4	41	33	38	YY	.....	YYYYY
53s	4	40	32	36	.....	.....	YYYYY
52s	4	38	30	35	.....	.....	YYYYY

Five offsuit

Hand	C	vs rnd	vs UTG	vs BTN	Open 40bb	Open 25bb	BB defend
54o	12	38	30	34	.....	.....	YYYYY
53o	12	36	28	33	.....	.....	YYYYY
52o	12	34	26	31	.....	.....	YYYYY

**Four suited**

Hand	C	vs rnd	vs UTG	vs BTN	Open 40bb	Open 25bb	BB defend
43s	4	39	31	36	.....	.....	YYYYY
42s	4	37	29	34	.....	.....	YYYYY

Four offsuit

Hand	C	vs rnd	vs UTG	vs BTN	Open 40bb	Open 25bb	BB defend
43o	12	35	27	32	.....	.....	YYYYY
42o	12	33	25	30	.....	.....	YYYYY

Three suited

Hand	C	vs rnd	vs UTG	vs BTN	Open 40bb	Open 25bb	BB defend
32s	4	36	28	33	.....	.....	YYYYY

Three offsuit

Hand	C	vs rnd	vs UTG	vs BTN	Open 40bb	Open 25bb	BB defend
32o	12	32	24	30	.....	.....	YYYYY

Range sizes: open 40bb UTG 13.1%, UTG1 15.5%, MP 17.6%, HJ 22.2%, CO 27.9%, BTN 42.1%, SB 38.8%; open 25bb UTG 12.4%, UTG1 14.6%, MP 17.3%, HJ 21.3%, CO 26.7%, BTN 39.1%, SB 32.4%. BB defend: vs UTG 94.6%, vs HJ 100.0%, vs CO 100.0%, vs BTN 100.0%, vs SB 99.1%.

Open 25bb, CO (26.7%)

	A	K	Q	J	T	9	8	7	6	5	4	3	2
A	X	X	X	X	X	X	X	X	X	X	X	X	X
K	X	X	X	X	X	X	X	X	X	.	.	.	.
Q	X	X	X	X	X	X	X	.	.	.	.	.	.
J	X	X	X	X	X	X	X	.	.	.	.	.	.
T	X	X	X	X	X	X	X	.	.	.	.	.	.
9	X	.	.	.	.	X	X	.	.	.	.	.	.
8	X	.	.	.	.	.	X	.	.	.	.	.	.
7	X	.	.	.	.	.	.	X	.	.	.	.	.
6	.	.	.	.	.	.	.	.	X	.	.	.	.
5	.	.	.	.	.	.	.	.	.	X	.	.	.
4	.	.	.	.	.	.	.	.	.	.	X	.	.
3	.	.	.	.	.	.	.	.	.	.	.	X	.
2	.	.	.	.	.	.	.	.	.	.	.	.	X

BB defend vs BTN (100.0%)

	A	K	Q	J	T	9	8	7	6	5	4	3	2
A	X	X	X	X	X	X	X	X	X	X	X	X	X
K	X	X	X	X	X	X	X	X	X	X	X	X	X
Q	X	X	X	X	X	X	X	X	X	X	X	X	X
J	X	X	X	X	X	X	X	X	X	X	X	X	X
T	X	X	X	X	X	X	X	X	X	X	X	X	X
9	X	X	X	X	X	X	X	X	X	X	X	X	X
8	X	X	X	X	X	X	X	X	X	X	X	X	X
7	X	X	X	X	X	X	X	X	X	X	X	X	X
6	X	X	X	X	X	X	X	X	X	X	X	X	X
5	X	X	X	X	X	X	X	X	X	X	X	X	X
4	X	X	X	X	X	X	X	X	X	X	X	X	X
3	X	X	X	X	X	X	X	X	X	X	X	X	X
2	X	X	X	X	X	X	X	X	X	X	X	X	X

6. All 169 hands: push/fold, BB calls and reshoves with antes [Computed, chip EV]

- **Push** at 15 / 10 / 7 / 5bb by seat **UTG · UTG1 · MP · HJ · CO · BTN · SB** (folded to you; 1bb BB ante; everyone has the same stack).
- **BB call** vs a **BTN** shove at 15 / 10 / 7 / 5bb. **vs BTN10** = equity vs the BTN 10bb shove range.
- **Reshove** = 3-bet all-in over a 2.2bb **CO** open at 12 / 15 / 20 / 25bb (blinds fold; the opener calls with the computed calling range).
- These are chip-EV ranges. On the bubble and at the final table, **tighten calls** by the ICM premiums in Section 3; shoving ranges tighten less.

Pocket pairs

Hand	vs BTN10	Push 15bb	Push 10bb	Push 7bb	Push 5bb	BB call 15-10-7-5	Reshove 12-15-20-25
AA	86	YYYYYYY	YYYYYYY	YYYYYYY	YYYYYYY	YYYY	YYYY
KK	79	YYYYYYY	YYYYYYY	YYYYYYY	YYYYYYY	YYYY	YYYY



Hand	vs BTN10	Push 15bb	Push 10bb	Push 7bb	Push 5bb	BB call 15·10·7·5	Reshove 12·15·20·25
QQ	74	YYYYYY	YYYYYY	YYYYYY	YYYYYY	YYYY	YYYY
JJ	70	YYYYYY	YYYYYY	YYYYYY	YYYYYY	YYYY	YYYY
TT	67	YYYYYY	YYYYYY	YYYYYY	YYYYYY	YYYY	YYYY
99	64	YYYYYY	YYYYYY	YYYYYY	YYYYYY	YYYY	YYYY
88	61	YYYYYY	YYYYYY	YYYYYY	YYYYYY	YYYY	YYYY
77	58	YYYYYY	YYYYYY	YYYYYY	YYYYYY	YYYY	YYYY
66	56	YYYYYY	YYYYYY	YYYYYY	YYYYYY	YYYY	YYYY
55	53	YYYYYY	YYYYYY	YYYYYY	YYYYYY	YYYY	YYYY
44	51	·YYYYY	YYYYYY	YYYYYY	YYYYYY	YYYY	YYYY
33	49	·YYYYY	YYYYYY	YYYYYY	YYYYYY	YYYY	YYYY
22	47	··YYYY	YYYYYY	YYYYYY	YYYYYY	YYYY	YYYY

Ace suited

Hand	vs BTN10	Push 15bb	Push 10bb	Push 7bb	Push 5bb	BB call 15·10·7·5	Reshove 12·15·20·25
AKs	66	YYYYYY	YYYYYY	YYYYYY	YYYYYY	YYYY	YYYY
AQs	64	YYYYYY	YYYYYY	YYYYYY	YYYYYY	YYYY	YYYY
AJs	62	YYYYYY	YYYYYY	YYYYYY	YYYYYY	YYYY	YYYY
ATs	60	YYYYYY	YYYYYY	YYYYYY	YYYYYY	YYYY	YYYY
A9s	57	·YYYYY	YYYYYY	YYYYYY	YYYYYY	YYYY	YYYY
A8s	55	··YYYY	YYYYYY	YYYYYY	YYYYYY	YYYY	YYYY
A7s	53	···YYY	·YYYYY	YYYYYY	YYYYYY	YYYY	YYYY
A6s	51	···YYY	··YYYY	YYYYYY	YYYYYY	YYYY	YYY·
A5s	51	···YYY	·YYYYY	YYYYYY	YYYYYY	YYYY	YYYY
A4s	50	···YYY	··YYYY	YYYYYY	YYYYYY	YYYY	YYY·
A3s	49	····YYY	··YYYY	YYYYYY	YYYYYY	YYYY	·Y·
A2s	48	····YYY	···YYY	YYYYYY	YYYYYY	YYYY	···

Ace offsuit

Hand	vs BTN10	Push 15bb	Push 10bb	Push 7bb	Push 5bb	BB call 15·10·7·5	Reshove 12·15·20·25
AKo	65	YYYYYY	YYYYYY	YYYYYY	YYYYYY	YYYY	YYYY
AQo	62	YYYYYY	YYYYYY	YYYYYY	YYYYYY	YYYY	YYYY
AJo	60	YYYYYY	YYYYYY	YYYYYY	YYYYYY	YYYY	YYYY
ATo	58	··YYYY	YYYYYY	YYYYYY	YYYYYY	YYYY	YYYY
A9o	55	···YYY	·YYYYY	YYYYYY	YYYYYY	YYYY	YYY·
A8o	52	····YYY	··YYYY	YYYYYY	YYYYYY	YYYY	YY·
A7o	50	····YYY	···YYY	YYYYYY	YYYYYY	YYYY	···
A6o	48	····YY	···YYY	YYYYYY	YYYYYY	YYYY	···
A5o	48	····YY	···YYY	YYYYYY	YYYYYY	YYYY	···
A4o	47	····YY	····YYY	·YYYYY	YYYYYY	·YYY	···
A3o	46	····YY	····YYY	··YYYY	YYYYYY	·YYY	···
A2o	45	····YY	····YYY	··YYYY	YYYYYY	·YYY	···

**King suited**

Hand	vs BTN10	Push 15bb	Push 10bb	Push 7bb	Push 5bb	BB call 15·10·7·5	Reshove 12·15·20·25
KQs	56	YYYYYY	YYYYYY	YYYYYY	YYYYYY	YYYY	YYYY
KJs	54	YYYYYY	YYYYYY	YYYYYY	YYYYYY	YYYY	YYYY
KTs	53	YYYYYY	YYYYYY	YYYYYY	YYYYYY	YYYY	YYYY
K9s	50	·YYYYY	·YYYYY	YYYYYY	YYYYYY	YYYY	··Y
K8s	47	··Y·YY	···YYY	·YYYYY	YYYYYY	·YYY	····
K7s	45	····YY	···YYY	···YYY	YYYYYY	·YYY	····
K6s	44	····YY	···YYY	···YYY	YYYYYY	·YYY	····
K5s	43	····YY	····YY	···YYY	YYYYYY	·YYY	····
K4s	42	····YY	····YY	···YYY	YYYYYY	·YYY	····
K3s	42	····Y	····YY	···YYY	YYYYYY	··YY	····
K2s	41	····Y	····YY	···YYY	YYYYYY	··YY	····

King offsuit

Hand	vs BTN10	Push 15bb	Push 10bb	Push 7bb	Push 5bb	BB call 15·10·7·5	Reshove 12·15·20·25
KQo	54	·YYYYY	YYYYYY	YYYYYY	YYYYYY	YYYY	YYYY
KJo	52	··YYYY	·YYYYY	YYYYYY	YYYYYY	YYYY	YY·
KTo	50	····YY	···YYY	·YYYYY	YYYYYY	YYYY	····
K9o	47	····Y	····YY	···YYY	YYYYYY	·YYY	····
K8o	44	····Y	····YY	···YYY	YYYYYY	·YYY	····
K7o	42	····Y	····YY	···YYY	YYYYYY	·YYY	····
K6o	41	····Y	····YY	····YY	YYYYYY	··YY	····
K5o	40	····Y	····Y	····YY	YYYYYY	··YY	····
K4o	39	····Y	····Y	····YY	·YYYYY	··YY	····
K3o	38	····Y	····Y	····YY	···YYY	··YY	····
K2o	38	····Y	····Y	····YY	···YYY	··YY	····

Queen suited

Hand	vs BTN10	Push 15bb	Push 10bb	Push 7bb	Push 5bb	BB call 15·10·7·5	Reshove 12·15·20·25
QJs	49	·YYYYY	YYYYYY	YYYYYY	YYYYYY	YYYY	YYYY
QTs	48	·YYYYY	YYYYYY	YYYYYY	YYYYYY	YYYY	YYYY
Q9s	45	·YYYYY	·YYYYY	·YYYYY	YYYYYY	·YYY	··Y
Q8s	43	··Y·YY	···YYY	···YYY	YYYYYY	·YYY	····
Q7s	41	····YY	····YY	···YYY	YYYYYY	··YY	····
Q6s	41	····YY	····YY	···YYY	·YYYYY	··YY	····
Q5s	40	····Y	····YY	····YY	···YYY	··YY	····
Q4s	39	····Y	····Y	····YY	···YYY	··YY	····
Q3s	39	····Y	····Y	····YY	···YYY	··YY	····
Q2s	38	····Y	····Y	····YY	···YYY	··Y	····

**Queen offsuit**

Hand	vs BTN10	Push 15bb	Push 10bb	Push 7bb	Push 5bb	BB call 15·10·7·5	Reshove 12·15·20·25
QJo	46	·····YYY	···YYYY	···YYYYY	YYYYYYY	YYYY	····
QTo	45	·····YY	·····YYY	···YYYY	YYYYYYY	·YYY	····
Q9o	42	·····Y	·····YY	·····YYY	YYYYYYY	·YYY	····
Q8o	40	·····Y	·····Y	·····YY	···YYYY	··YY	····
Q7o	38	·····Y	·····Y	·····Y	···YYY	··Y	····
Q6o	37	·····Y	·····Y	·····Y	·····YY	··Y	····
Q5o	37	·····	·····Y	·····Y	·····YY	··Y	····
Q4o	36	·····	·····Y	·····Y	·····YY	··Y	····
Q3o	35	·····	·····Y	·····Y	·····YY	··Y	····
Q2o	34	·····	·····Y	·····Y	·····Y	··Y	····

Jack suited

Hand	vs BTN10	Push 15bb	Push 10bb	Push 7bb	Push 5bb	BB call 15·10·7·5	Reshove 12·15·20·25
JTs	46	·YYYYYY	YYYYYYY	YYYYYYY	YYYYYYY	YYYY	YYYY
J9s	44	·YYYYY	···YYYY	···YYYY	YYYYYYY	·YYY	··YY
J8s	42	···YYYY	···YYYY	···YYYY	YYYYYYY	··YY	····
J7s	40	·····YY	·····YY	·····YYY	···YYYY	··YY	····
J6s	39	·····Y	·····Y	·····YY	·····YYY	··YY	····
J5s	39	·····Y	·····Y	·····YY	·····YY	··Y	····
J4s	38	·····Y	·····Y	·····Y	·····YY	··Y	····
J3s	38	·····Y	·····Y	·····Y	·····YY	··Y	····
J2s	37	·····Y	·····Y	·····Y	·····Y	··Y	····

Jack offsuit

Hand	vs BTN10	Push 15bb	Push 10bb	Push 7bb	Push 5bb	BB call 15·10·7·5	Reshove 12·15·20·25
JTo	43	·····YYY	···YYYY	···YYYY	YYYYYYY	·YYY	····
J9o	40	·····Y	·····Y	·····YY	···YYYY	··YY	····
J8o	39	·····Y	·····Y	·····Y	·····YYY	··Y	····
J7o	37	·····	·····Y	·····Y	·····YY	··Y	····
J6o	35	·····	·····Y	·····Y	·····Y	··Y	····
J5o	35	·····	·····Y	·····Y	·····Y	··Y	····
J4o	34	·····	·····	·····Y	·····Y	··Y	····
J3o	34	·····	·····	·····Y	·····Y	···	····
J2o	33	·····	·····	·····Y	·····Y	···	····

Ten suited

Hand	vs BTN10	Push 15bb	Push 10bb	Push 7bb	Push 5bb	BB call 15·10·7·5	Reshove 12·15·20·25
T9s	43	···YYYYY	·YYYYYY	·YYYYYY	YYYYYYY	·YYY	·YYY
T8s	41	···YYYY	···YYYY	···YYYY	YYYYYYY	··YY	··YY
T7s	40	·····YYY	·····YYY	·····YYY	···YYYY	··YY	····
T6s	38	·····Y	·····Y	·····YY	·····YY	··YY	····



Hand	vs BTN10	Push 15bb	Push 10bb	Push 7bb	Push 5bb	BB call 15-10-7-5	Reshove 12-15-20-25
T5s	37	Y	Y	Y	Y	...Y	....
T4s	37	Y	Y	Y	Y	...Y	....
T3s	36	Y	Y	Y	Y	...Y	....
T2s	36	.....	.....Y	Y	Y	...Y	....

Ten offsuit

Hand	vs BTN10	Push 15bb	Push 10bb	Push 7bb	Push 5bb	BB call 15-10-7-5	Reshove 12-15-20-25
T9o	40	YY	YY	YY	...YYYY	..YY	....
T8o	38	Y	Y	Y	YY	...Y	....
T7o	36	Y	Y	Y	Y	...Y	....
T6o	35	.....	.....	.....Y	Y	...Y	....
T5o	34	.....	.....	.....Y	Y	...	....
T4o	33	.....	.....	.....	.....Y	....	....
T3o	32	.....	.....	.....	.....Y	....	....
T2o	32	.....	.....	.....	.....Y	....	....

Nine suited

Hand	vs BTN10	Push 15bb	Push 10bb	Push 7bb	Push 5bb	BB call 15-10-7-5	Reshove 12-15-20-25
98s	41	..YYYYY	..YYYYY	..YYYYY	YYYYYYY	..YY	..YY
97s	40	...YYYY	...YYYY	...YYYY	...YYYY	..YY	....
96s	39	YY	YY	YY	YY	..YY	....
95s	37	Y	Y	Y	Y	...Y	....
94s	36	.....	.....Y	Y	Y	...Y	....
93s	35	.....	.....Y	Y	Y	...Y	....
92s	35	.....	.....	.....Y	Y	...Y	....

Nine offsuit

Hand	vs BTN10	Push 15bb	Push 10bb	Push 7bb	Push 5bb	BB call 15-10-7-5	Reshove 12-15-20-25
98o	38	Y	Y	Y	YY	...Y	....
97o	37	Y	Y	Y	Y	...Y	....
96o	35	.....	.....Y	Y	Y	...Y	....
95o	34	.....	.....	.....	.....Y	....	....
94o	32	.....	.....	.....	.....	....	....
93o	32	.....	.....	.....	.....	....	....
92o	31	.....	.....	.....	.....	....	....

Eight suited

Hand	vs BTN10	Push 15bb	Push 10bb	Push 7bb	Push 5bb	BB call 15-10-7-5	Reshove 12-15-20-25
87s	40	...YYYY	..YYYYY	...YYYY	..YYYYY	..YY	..YY
86s	39	YYY	YYY	YYY	YY	..YY	....
85s	38	Y	YY	Y	Y	...Y	....
84s	36	Y	Y	Y	Y	...Y	....



Hand	vs BTN10	Push 15bb	Push 10bb	Push 7bb	Push 5bb	BB call 15·10·7·5	Reshove 12·15·20·25
83s	34	.....	.....	.....Y	Y	....	....
82s	34	.....	.....	.....	.....Y	....	....

Eight offsuit

Hand	vs BTN10	Push 15bb	Push 10bb	Push 7bb	Push 5bb	BB call 15·10·7·5	Reshove 12·15·20·25
87o	37	Y	Y	Y	Y	...Y	....
86o	36	.....	.....Y	Y	Y	...Y	....
85o	34	.....	.....	.....	.....Y	....	....
84o	33	.....	.....	.....	.....	....	....
83o	31	.....	.....	.....	.....	....	....
82o	30	.....	.....	.....	.....	....	....

Seven suited

Hand	vs BTN10	Push 15bb	Push 10bb	Push 7bb	Push 5bb	BB call 15·10·7·5	Reshove 12·15·20·25
76s	39	...YYY	...YYY	...YYY	...YYY	..YY	....
75s	38	...YY	...YY	...YY	...Y	...Y	....
74s	37	...Y	...Y	...Y	...Y	...Y	....
73s	35	.....	...Y	...Y	...Y	...Y	....
72s	33	.....	.....	.....	.....	....	....

Seven offsuit

Hand	vs BTN10	Push 15bb	Push 10bb	Push 7bb	Push 5bb	BB call 15·10·7·5	Reshove 12·15·20·25
76o	36	Y	Y	Y	Y	...Y	....
75o	35	.....	.....	.....Y	Y	...Y	....
74o	33	.....	.....	.....	.....	....	....
73o	31	.....	.....	.....	.....	....	....
72o	30	.....	.....	.....	.....	....	....

Six suited

Hand	vs BTN10	Push 15bb	Push 10bb	Push 7bb	Push 5bb	BB call 15·10·7·5	Reshove 12·15·20·25
65s	38	...YYY	...YYY	...YYY	...Y	..YY	....
64s	37	...Y	...YY	...Y	...Y	...Y	....
63s	35	...Y	...Y	...Y	...Y	...Y	....
62s	34	.....	.....	.....	.....	....	....

Six offsuit

Hand	vs BTN10	Push 15bb	Push 10bb	Push 7bb	Push 5bb	BB call 15·10·7·5	Reshove 12·15·20·25
65o	35	Y	Y	Y	Y	...Y	...
64o	34	.....	.....	.....	.....	....	....
63o	32	.....	.....	.....	.....	....	....
62o	30	.....	.....	.....	.....	....	....

**Five suited**

Hand	vs BTN10	Push 15bb	Push 10bb	Push 7bb	Push 5bb	BB call 15·10·7·5	Reshove 12·15·20·25
54s	38	YY	YY	YY	Y	...Y	....
53s	36	Y	Y	Y	Y	...Y	....
52s	35	Y	Y	Y	Y	...Y	....

Five offsuit

Hand	vs BTN10	Push 15bb	Push 10bb	Push 7bb	Push 5bb	BB call 15·10·7·5	Reshove 12·15·20·25
54o	34	.....	.....Y	Y	.....	...Y	....
53o	33	.....	.....	.....	.....	....	....
52o	31	.....	.....	.....	.....	....	....

Four suited

Hand	vs BTN10	Push 15bb	Push 10bb	Push 7bb	Push 5bb	BB call 15·10·7·5	Reshove 12·15·20·25
43s	36	Y	Y	Y	Y	...Y	....
42s	34	.....	.....	.....	.....	...Y	....

Four offsuit

Hand	vs BTN10	Push 15bb	Push 10bb	Push 7bb	Push 5bb	BB call 15·10·7·5	Reshove 12·15·20·25
43o	32	.....	.....	.....	.....	....	....
42o	31	.....	.....	.....	.....	....	....

Three suited

Hand	vs BTN10	Push 15bb	Push 10bb	Push 7bb	Push 5bb	BB call 15·10·7·5	Reshove 12·15·20·25
32s	34	.....	.....	.....	.....	....	....

Three offsuit

Hand	vs BTN10	Push 15bb	Push 10bb	Push 7bb	Push 5bb	BB call 15·10·7·5	Reshove 12·15·20·25
32o	30	.....	.....	.....	.....	....	....

Push % by seat [Computed]

Stack	UTG	UTG1	MP	HJ	CO	BTN	SB	BB call vs BTN
15bb	9.4%	11.5%	15.5%	20.4%	25.2%	36.0%	62.3%	23.4%
10bb	14.0%	15.8%	20.4%	27.0%	32.7%	42.1%	72.5%	34.2%
7bb	21.6%	23.7%	27.6%	33.0%	38.5%	48.7%	78.6%	47.5%
5bb	37.9%	38.2%	40.3%	44.2%	48.4%	56.6%	82.5%	75.9%

Reshove vs a 2.2bb open [Computed]

Opener	12bb	15bb	20bb	25bb	Opener's call (of opening range) at 20bb
HJ	14.2%	14.9%	14.2%	13.6%	48.9%
CO	17.9%	18.6%	17.6%	16.7%	50.8%
BTN	25.8%	26.4%	26.7%	24.6%	52.9%

With a big BB ante the 5bb push ranges get very wide and the BB calls very wide too; at 5bb, just shove most hands first-in. These ranges assume the field calls correctly; at micros people **call too**



tight early and too loose late, so shove a little tighter against calling stations.

Push 10bb HJ (27.0%)

	A	K	Q	J	T	9	8	7	6	5	4	3	2
A	X	X	X	X	X	X	X	X	X	X	X	X	X
K	X	X	X	X	X	X	.	.	.	.	.	.	.
Q	X	X	X	X	X	X	.	.	.	.	.	.	.
J	X	X	X	X	X	X	X	.	.	.	.	.	.
T	X	X	.	X	X	X	X	.	.	.	.	.	.
9	X	.	.	.	.	X	X	X	.	.	.	.	.
8	X	.	.	.	.	.	X	X	.	.	.	.	.
7	X	.	.	.	.	.	.	X	X	.	.	.	.
6	X	.	.	.	.	.	.	.	X	.	.	.	.
5	X	.	.	.	.	.	.	.	.	X	.	.	.
4	.	.	.	.	.	.	.	.	.	.	X	.	.
3	.	.	.	.	.	.	.	.	.	.	.	X	.
2	.	.	.	.	.	.	.	.	.	.	.	.	X

Reshove 20bb vs CO (17.6%)

	A	K	Q	J	T	9	8	7	6	5	4	3	2
A	X	X	X	X	X	X	X	X	X	X	X	.	.
K	X	X	X	X	X	.	.	.	.	.	.	.	.
Q	X	X	X	X	X	.	.	.	.	.	.	.	.
J	X	.	.	X	X	X	.	.	.	.	.	.	.
T	X	.	.	.	X	X	X	.	.	.	.	.	.
9	X	.	.	.	.	X	X	.	.	.	.	.	.
8	.	.	.	.	.	.	X	X	.	.	.	.	.
7	.	.	.	.	.	.	.	X	.	.	.	.	.
6	.	.	.	.	.	.	.	.	X	.	.	.	.
5	.	.	.	.	.	.	.	.	.	X	.	.	.
4	.	.	.	.	.	.	.	.	.	.	X	.	.
3	.	.	.	.	.	.	.	.	.	.	.	X	.
2	.	.	.	.	.	.	.	.	.	.	.	.	X

7. Bounties / PKO [Computed + Approx.]

In a progressive-knockout, part of the bounty you win is paid as cash. Convert the cash part into chips: **bounty value (bb) ≈ cash bounty ÷ (buy-in's prize-pool share) × starting chips ÷ big blind** [Approx.]. Early, a starting bounty is worth roughly **half a starting stack** when half the buy-in goes to bounties. When you **cover** the shover, equity needed to call S bb with 2.5 bb dead = $S ÷ (2S + 2.5 + \text{bounty value})$:

Call size	Bounty 0bb	5bb	10bb	20bb	40bb
10bb	44.4%	36.4%	30.8%	23.5%	16.0%
20bb	47.1%	42.1%	38.1%	32.0%	24.2%
30bb	48.0%	44.4%	41.4%	36.4%	29.3%

- Only the player who **covers** can win the bounty; when you are covered, ignore it.
- Bounties widen calls a lot vs short stacks, and make you a target when you're short and carry a big bounty. ICM premiums still apply near the money.

8. Rebuys, add-ons, late registration, table changes, stamina [Consensus]

- Rebuys/add-ons:** take the add-on when it's worth at least about as many chips per dollar as the buy-in and you're below about average; fields rebuying aggressively play looser early, so value-bet more. Budget for rebuys up front: a \$3.30 rebuy event can cost \$10+ per bullet set.
- Late registration:** registering late gives up the early edge vs weak players and starts you shorter in bb; it saves time and lowers variance per hour. At micros where early play is soft, registering early is usually better [Consensus]. Count re-entries as separate buy-ins in your results.
- Table changes:** each new table resets your reads; note stacks and who covers you. A table break near the bubble changes position around the blinds, so check where the short stacks sit.
- Stamina/session:** big fields take 4–8 hours. Set a session cap, eat and break at the hourly breaks, and avoid adding new tables late when tired. Decide in advance how many tables you'll run (at most 2–4 while learning).
- Bankroll [Approx.]:** given the swings in Section 1, keep at least **100–200 buy-ins** for big-field MTTs, and don't move up after a single deep run.



9. Walkthroughs (18) [Computed]

- 1. Bubble.** Bubble (31 left, 30 paid): hero 25bb calls a 50bb shove, hero holds **AQo** vs the BTN 15bb push range: equity **61.2%**, needs **67.5%** → **fold**.
- 2. Bubble.** Bubble: hero 50bb calls a 25bb shove, hero holds **ATs** vs the BTN 15bb push range: equity **59.1%**, needs **55.2%** → **call**.
- 3. Bubble.** Bubble: hero 15bb calls a 60bb shove, hero holds **99** vs the BTN 15bb push range: equity **62.5%**, needs **67.2%** → **fold**.
- 4. Mid-money.** Mid-money: hero 60bb calls a 30bb shove, hero holds **KJs** vs the BTN 15bb push range: equity **51.3%**, needs **54.4%** → **fold**.
- 5. Final table.** FT (8 left): 35bb calls the 90bb leader, hero holds **KQo** vs the BTN 10bb push range: equity **53.7%**, needs **61.8%** → **fold**.
- 6. Final table.** FT: 90bb leader calls a 35bb shove, hero holds **ATo** vs the BTN 10bb push range: equity **58.0%**, needs **53.6%** → **call**.
- 7. Final table.** FT: 20bb calls a 45bb shove, hero holds **77** vs the BTN 15bb push range: equity **57.2%**, needs **58.0%** → **fold**.
- 8. Push.** 10bb, folded to hero in the **UTG** with **A5o**: **fold** (it's not in the 14.0% range); equity vs a random hand 57.3%.
- 9. Push.** 7bb, folded to hero in the **BTN** with **K6o**: **shove** (it's in the 48.7% range); equity vs a random hand 54.0%.
- 10. Push.** 15bb, folded to hero in the **SB** with **Q4s**: **shove** (it's in the 62.3% range); equity vs a random hand 51.7%.
- 11. Push.** 5bb, folded to hero in the **CO** with **96s**: **fold** (it's not in the 48.4% range); equity vs a random hand 47.4%.
- 12. Reshove.** 20bb, CO opens 2.2bb, hero has **A5s**: **reshove**. Reshove range 17.6%; CO calls with 50.8% of its opens.
- 13. Reshove.** 15bb, HJ opens 2.2bb, hero has **KJo**: **fold** (or call in position if deep enough). Reshove range 14.9%; HJ calls with 62.4% of its opens.
- 14. BB defence.** BTN opens 2bb (25bb), hero in the BB with **T6o**: equity 34.1% × realization 0.7 = 23.9% vs price 18.2% → **defend**.
- 15. BB defence.** UTG opens 2bb (25bb), hero in the BB with **K9o**: equity 33.5% × realization 0.7 = 23.4% vs price 18.2% → **defend**.
- 16. PKO.** Hero covers a 20bb BTN shove and holds **A7o** in the BB; the villain's bounty is worth ~10bb. Equity vs the 15bb push range is 48.3% (a rough proxy for the 20bb range); without the bounty hero needs 44.4%, with it **32.3%** → **call**.
- 17. Variance check.** Break-even player, 22 MTTs of 200 runners: P(at least one top-10) is **67.4%** in the simulation (exact $1 - 0.95^{22} = 67.4\%$), so going 0-for-22 happens about a third of the time.
- 18. Heads-up for the title.** 15bb effective, hero SB with **K2o**: **fold** (or limp/raise small) per the no-ante HU range (45.7%); equity when called 32.6%.



10. Drills: 30 spots

1. Break-even, 200 runners: top-10 chance per event?
2. P(no top-10 in 22) at break-even, 200 runners?
3. +20% ROI player, 22 MTTs (200): P(losing)?
4. +20% ROI, 1,000 MTTs (200): P(losing)?
5. Places paid in the 200 model?
6. 1st place, 200 model, $\times$ buy-in?
7. Min-cash, 500 model, $\times$ buy-in?
8. FT share of the 200 pool?
9. Bubble: 25bb calling a 50bb shove needs?
10. Bubble: 60bb calling a 15bb shove needs?
11. FT: 35bb calling the 90bb leader needs?
12. FT: 70bb vs 55bb needs?
13. 12bb FT short stack's ICM share?
14. UTG push % at 10bb?
15. BTN push % at 15bb?
16. SB push % at 7bb?
17. BB call vs BTN 10bb?
18. Reshove % vs CO open at 20bb?
19. CO opening range at 25bb?
20. BB defence vs BTN (25bb)?
21. BB price vs a 2bb open with 1bb ante?
22. A5o UTG 10bb?
23. K6o BTN 7bb?
24. Q4s SB 15bb?
25. J8o HJ 10bb?
26. 22 UTG 15bb?
27. PKO: call 20bb, 10bb bounty, equity needed?
28. PKO: call 10bb, 20bb bounty?
29. Is the bounty relevant when you're covered?
30. +50% ROI (200), 300 MTTs: 5th-percentile ROI?

Answers

1. 5.0% · 2. 32.6% · 3. 52.4% · 4. 6.7% · 5. 30 · 6. 42.0 $\times$ · 7. 1.7 $\times$ · 8. 64.3% · 9. 67.5% · 10. 52.5% · 11. 61.8% · 12. 58.8% · 13. 5.08% · 14. 14.0% · 15. 36.0% · 16. 78.6% · 17. 34.2% · 18. 17.6% · 19. 26.7% · 20. 100.0% · 21. 18.2% · 22. Fold · 23. Shove · 24. Shove · 25. Fold · 26. Fold · 27. 32.3% · 28. 23.5% · 29. No · 30. 7%

All ranges are chip-EV approximations or consensus guidelines; ICM spots use one representative stack setup; variance uses a simplified finish model. Not solver output. For study away from the table, not for real-time use during play. Only play with money you can afford to lose.



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