Option C Full RoR + Sizing Playbook

TLDR

Trading a prop account is not just about finding good entries. The survival-profit triangle means you must size to survive, structure cycles with convexity, and maintain positive expectancy. Most fail because they ignore one of the three. This playbook gives examples, math, and templates to balance them.

1) Combine Expectancy, Convexity, and RoR Survival

Define:

Expectancy per trade $E = p * Win - (1 - p) * Loss$. Convexity per cycle is the non-linear tilt created by bounding losses while keeping upside targets larger. RoR survival is the chance that you avoid crossing a failure boundary before reaching a profit boundary.

Explain:

You win by stacking positive E while structuring trade cycles so that the path to gains is easier than the path to ruin. Survival is the gate; without it, expectancy never realizes.

Interpret:

Blending all three turns random wins into a repeatable plan. You size to survive, you set cycle targets and stops to create convexity, and you verify that E stays positive.

Example A: Expectancy per trade

E1 = 0.344 R per trade. At 200 trades per year with $100 risk per trade, expected yearly gain ≈ $6,880.

Example B: Convexity per cycle

Cycle: win 5 R or lose 3 R with p = 0.45. Probability of hitting win side = 0.208. Expected payoff per cycle = -1.340 R. Convexity flips small edges into survivable positive cycles.

Example C: Daily survival

0.5 percent risk per trade, 2 percent daily stop. 4 losses end the day. Probability of at least one such streak in 10 trades ≈ 0.489. Survival sizing reduces this risk.

2) The Survival-Profit Triangle

Define:

Three sides: risk, survival, and profit. Remove one and payouts collapse.

Explain:

Push profit without survival and you reset often. Protect too much and you never hit targets. Balance is key.

Interpret:

This explains why skilled traders still fail evaluations. They lean too much on one side of the triangle.

Example D: Conservative vs aggressive

Conservative: 0.25 percent risk per trade with 2 percent daily stop. Aggressive: 1.5 percent per trade with 3 percent daily stop. Chance of streak hitting stop is 0.489 vs 0.961. Aggressive looks fast but fails more often.

3) Templates for Risk Rules

Template 1: Intraday survival

Risk 0.40 percent per trade, max daily DD 2.0 percent. 5 losses end the day, giving more survival runway.

Template 2: Cycle convexity

Use +6 R / -3 R cycle. Asymmetric stops build convexity into your system.

Template 3: Weekly breaker

Hard stop at -6 R per week, reset size 50 percent next week. Breakers prevent compound losses.

4) Risk of Ruin Illustration

Starting with 10 R buffer aiming for +20 R before -10 R, with p = 0.45, probability of ruin before the goal ≈ 0.984. This proves why RoR must be checked, not assumed.

Recap

Survival comes first, profit second, and risk sizing links them. Expectancy means little if you blow up early. Convexity in cycle design lets you stay positive even if raw win rate is below 50 percent. Templates enforce discipline and give you enough time for math to work in your favor. The survival-profit triangle is not theory, it is the frame that decides whether payouts are consistent or just luck.