ACTP — Core Mathematical Spine

B. Multi-Timeframe Admissibility Aggregation
We define a fixed timeframe set T = {5m, 15m, 1h, 4h}. For each asset a and timeframe t,
admissibility $A(a,t) \in \{0,1\}$. Global admissibility is defined as a strict logical AND
over required frames:
$A^*(a) = \wedge A(a,t)$.
Any inadmissible required frame blocks execution entirely.

C. Predicate Reduction
Each cell admissibility is defined by three binary predicates only:
P1: Directional Structure (non-countertrend)
P2: Volatility Admissibility (bounded realized volatility)
P3: Liquidity Presence (bounded exit feasibility)
Cell admissibility is defined as $A(a,t) = P1 \wedge P2 \wedge P3$.
This predicate set is irreducible.

D. Capital Velocity Mathematics
Expected growth per trade: $E = p \cdot g - (1-p) \cdot \blacksquare$.
Expected growth per unit time: $G = N \cdot E$.
ACTP maximizes trade frequency N while preserving survivability.