The PMP® Formula Sheet — 2026 Edition

Every formula on the 2026 exam, in plain English, with a worked example for each.

✓ Reviewed by a PMBOK® Guide 8th Edition contributor · Updated July 2026 · aligned to the current ECO · pmlearning.org

Earned Value — the core four

Formula name	Formula	What it tells you	Worked example
Planned Value	`PV = Planned % × BAC`	What the schedule says you should have earned by today.	Budget $100k, 40% planned → PV = $40,000
Earned Value	`EV = Actual % × BAC`	What the completed work is actually worth — the anchor of everything.	35% done on $100k → EV = $35,000
Cost Variance	`CV = EV − AC`	Negative = over budget. EV always comes first.	35k − 42k = −$7,000 (over budget)
Schedule Variance	`SV = EV − PV`	Negative = behind schedule.	35k − 40k = −$5,000 (behind)

Performance indexes

Formula name	Formula	What it tells you	Worked example
Cost Performance Index	`CPI = EV ÷ AC`	Value per dollar spent. Below 1.0 = over budget.	35k ÷ 42k = 0.83 → 83¢ of work per $1
Schedule Performance Index	`SPI = EV ÷ PV`	Work rate vs. plan. Below 1.0 = behind.	35k ÷ 40k = 0.875 → 87.5% of planned pace

Forecasting

Formula name	Formula	What it tells you	Worked example
EAC — typical case	`EAC = BAC ÷ CPI`	Final cost if current efficiency continues (the default on the exam).	100k ÷ 0.83 ≈ $120,500

EAC — one-time blip	`EAC = AC + (BAC − EV)`	Use when the overrun was a one-off; rest goes to plan.	42k + 65k = $107,000
Estimate to Complete	`ETC = EAC − AC`	Money still needed from today.	120.5k − 42k = $78,500
Variance at Completion	`VAC = BAC − EAC`	Size of the final surprise. Negative = overrun coming.	100k − 120.5k = −$20,500
To-Complete Perf. Index	`TCPI = (BAC−EV) ÷ (BAC−AC)`	Efficiency needed on remaining work to hit budget. >1.10 = re-baseline.	65k ÷ 58k = 1.12

Schedule & estimating

Formula name	Formula	What it tells you	Worked example
Total Float	`Float = LS − ES (or LF − EF)`	Slip allowed without moving the finish date. Critical path = 0.	ES day 3, LS day 6 → 3 days
PERT (Beta) Estimate	`E = (O + 4M + P) ÷ 6`	Weighted three-point estimate.	(4 + 24 + 14) ÷ 6 = 7 days
PERT Std. Deviation	`σ = (P − O) ÷ 6`	Uncertainty range around a PERT estimate.	(14 − 4) ÷ 6 ≈ 1.67 days
Communication Channels	`n(n−1) ÷ 2`	Why adding people multiplies complexity.	10 people → 45 channels

Memorized the formulas? Now train the judgment. The 2026 PMP is 180 questions in 240 minutes — most test decisions, not arithmetic. Practice these inside realistic situational questions, free: **pmlearning.org/pmp/practice-exam**