

ACT Cheat Sheet

actfreestudyguide.com

2026 Enhanced Format
Free · no signup · verified vs ACT.org

FORMAT & PACE

SECTION	Q	TIME	PACE/Q	STATUS
English	50	35 min	~42 s	Core
Math	45	50 min	~67 s	Core · 4 choices, no formula sheet
Reading	36	40 min	~67 s	Core
Science	40	40 min	~60 s	Optional · separate
Writing	1	40 min	—	Optional · separate (4 domains, 2–12)

- **Composite (1–36)** = average of English, Math, Reading only. Core test ≈ 125 min / 131 Q.
- **No penalty for wrong answers** — never leave a blank. Digital test is linear (not adaptive); Math has an on-screen Desmos calculator.

MATH — MEMORIZE (NO FORMULA SHEET)

Geometry

- Pythagorean $a^2 + b^2 = c^2$ · triples 3-4-5, 5-12-13, 8-15-17
- 45-45-90 → $x, x, x\sqrt{2}$ · 30-60-90 → $x, x\sqrt{3}, 2x$
- Area: tri $\frac{1}{2}bh$ · circle πr^2 · rect lw · trap $\frac{1}{2}(b_1+b_2)h$
- Circle: circumference $2\pi r$ · arc/sector = fraction of 360°

Algebra & Lines

- Slope $m = (y_2 - y_1) / (x_2 - x_1)$ · line $y = mx + b$
- Distance $\sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2}$
- Midpoint $((x_1 + x_2) / 2, (y_1 + y_2) / 2)$
- Quadratic $x = (-b \pm \sqrt{b^2 - 4ac}) / 2a$
- Exponents $x^a \cdot x^b = x^{a+b}$ · $(x^a)^b = x^{ab}$ · $x^{-a} = 1/x^a$

Trig & Other

- SOH-CAH-TOA: $\sin = \text{opp/hyp}$, $\cos = \text{adj/hyp}$, $\tan = \text{opp/adj}$
- % change $= (\text{new} - \text{old}) / \text{old} \times 100$ · avg $= \text{sum/count}$ · prob $= \text{fav/total}$

ENGLISH — PUNCTUATION

- **Comma:** nonessential info (both sides), list items, after an intro phrase.
- **Semicolon:** joins two *complete* sentences (= a period).
- **Colon:** after a complete sentence, to introduce a list/explanation.
- **Dash:** a stronger comma; sets off an aside or leads to emphasis.
- **Apostrophe:** possession (**dog's**, **dogs'**) — never plurals.
- **Its**=possessive · **It's**=it is · Their/There/They're · Your/You're.
- Unsure? Pick the **shortest grammatically correct** option.

READING & SCIENCE

- **Reading:** the answer is in the text. Kill **too extreme** **half-right** **true but irrelevant** **out of scope**.
- **Reading pace:** ~10 min/passage; flag & move if stuck.
- **Science:** it's graph-reading — hit the questions, mine the figures, watch axes/units.
- **Variables:** independent = changed · dependent = measured · control = baseline.
- **EXCEPT / NOT / LEAST** flip what you're hunting for.

TEST-DAY PACE RULE

- If a question costs more than its budget, **guess a letter, flag it, move on**.
- With ~1 min left, **fill every blank** — a guess beats a zero.