

NHA EKG (CET) Cheat Sheet 2026

The night-before summary, built like the exam.

120 Scored questions	2h Time limit	390 (scaled, 200-500) Passing score
\$117 Exam fee	NHA Governing body	

Fast-reference facts, rhythm rules, and lead placement to memorize before test day.

Exam Snapshot (Must-Memorize Numbers)

- 100 scored questions (NHA may add unscored pretest items on top).
- 120 minutes total testing time.
- Passing = scaled score of 390 or higher (not a raw% — scaled to normalize difficulty).
- Exam fee: \$117.
- Pacing target: roughly 1.2 min/question (120 min ÷ 100) — don't stall on a single strip.

EKG Paper & Time/Voltage Basics

- Standard speed: 25 mm/sec.
- Small box = 0.04 sec (1 mm horizontally); large box = 0.20 sec (5 small boxes).
- Five large boxes = 1 second; thirty large boxes = 6 seconds.
- Standard calibration: 10 mm = 1 mV (vertical). One small box = 0.1 mV.

Normal Waveform Values

- P wave: atrial depolarization; < 0.12 sec, < 2.5 mm tall.
- PR interval: 0.12–0.20 sec (start of P to start of QRS).
- QRS complex: ventricular depolarization; 0.06–0.10 sec (> 0.12 = wide/abnormal).
- QT interval: ~0.36–0.44 sec (varies with rate; use QTc).
- T wave: ventricular repolarization. Atrial repolarization is hidden inside the QRS.

Heart Rate Calculation Methods

- 300 method (regular rhythms): 300 ÷ number of large boxes between two R waves. (Sequence: 300–150–100–75–60–50.)
- 1500 method: 1500 ÷ number of small boxes between two R waves — precise for regular rhythms.
- 6-second method (irregular rhythms): count QRS complexes in a 6-sec strip × 10.

12-Lead System (Groups & Views)

- Bipolar limb leads: I, II, III (Einthoven's Triangle). Lead II is the classic rhythm-strip lead.
- Augmented limb leads: aVR, aVL, aVF (unipolar).
- Precordial/chest leads: V1–V6 (horizontal plane view of the heart).
- Inferior wall: II, III, aVF. Lateral: I, aVL, V5, V6. Septal: V1, V2. Anterior: V3, V4.

Precordial (Chest) Lead Placement — Memorize Exactly

- V1: 4th intercostal space, right sternal border.
- V2: 4th intercostal space, left sternal border.

- V4: 5th intercostal space, left midclavicular line (place V4 before V3).
- V3: midway between V2 and V4.
- V5: level with V4, anterior axillary line.
- V6: level with V4/V5, midaxillary line.

Limb Electrode Placement ("Smoke over Fire")

- RA = white, LA = black, LL = red ("smoke over fire" = black over red on the left), RL = green (ground). Mnemonic: "White on right; smoke over fire."

Key Rhythms to Recognize

- NSR: rate 60–100, regular, P before every QRS, PR 0.12–0.20.
- Sinus bradycardia < 60 bpm; sinus tachycardia > 100 bpm.
- Afib: irregularly irregular, no discernible P waves.
- Aflutter: "sawtooth" flutter waves.
- VTach: wide QRS, rapid, regular — life-threatening.
- VFib: chaotic, no organized complexes — defibrillate.
- Asystole: flat line (confirm in 2 leads).

Artifact & Troubleshooting

- Somatic (muscle) tremor: jagged baseline — patient movement/shivering.
- Wandering baseline: respiration or loose/dry electrodes.
- 60-cycle (AC) interference: uniform fuzzy baseline — nearby electrical equipment; check cables/grounding.
- Fix: ensure clean, dry skin, secure electrodes, still patient, untangled lead wires.

Test-Day Strategy

- With 120 minutes for 100 items, flag and skip hard strips; return after an easy first pass.
- Aim well above the 390 threshold by mastering rate methods, PR/QRS limits, and lead placement — the highest-yield recall topics.

Official sources

- National Healthcareer Association (NHA) — Certified EKG Technician — Overview:
<https://www.nhanow.com/certifications/ekg-technician>
- NHA — NHA CET Certification: [https://www.nhanow.com/certification/nha-certifications/certified-ekg-technician-\(cet\)](https://www.nhanow.com/certification/nha-certifications/certified-ekg-technician-(cet))
- National Healthcareer Association (NHA) — Renew / Reinstate Certification:
<https://www.nhanow.com/certification/Before-After-Certification/renew-reinstate-certification>

Free practice questions for this exam: www.everyexamprep.com/practice/exams/healthcare/nha-cet