

Cardiopulmonary system

✓ Cardiac rehab phases:

- Phase I (inpatient): 2–3 METs
- Phase II (outpatient): 5 METs or less
- Phase III (maintenance): independent, community-based exercise

METs by activity

METs	Activities
1–2	Bed mobility
3–4	Showering seated, walking
5–6	Stairs, sexual activity
7+	Jogging, sports

✓ Heart sounds:

- S1: AV valves close
- S2: semilunar valves close
- S3: CHF (ventricular gallop)
- S4: MI or a stiff ventricle (atrial gallop)

✓ ECG clues:

- ST ↑: MI
- A-fib: irregular, no P waves
- V-fib: chaotic, fatal
- PR > 0.2 s: 1° AV block
- Wide QRS: PVC

Lab values and ABGs

Lab values for exercise

Lab	No exercise	Light exercise	No contraindication
Hct	<25%	25–30%	>30%
Hgb	<8 g/dL	8–10 g/dL	>10 g/dL
Platelets	<20k	20–50k	>50k
WBC	<5k with fever	>5k	—

INR: normal 0.8–1.2; therapeutic on warfarin 2–3; above 3.5, use caution

Arterial blood gases (ABGs)

Value	Normal range
pH	7.35–7.45
PaCO ₂	35–45 mmHg
HCO ₃	22–26 mEq/L
PaO ₂	80–100 mmHg
SaO ₂	95–100% (keep above 90% during exercise)

✓ Mnemonic: ROME

- Respiratory = Opposite: pH and CO₂ move in opposite directions
- Metabolic = Equal: pH and HCO₃ move the same way
- e.g., ↓pH + ↑CO₂ = respiratory acidosis

Integumentary system

✓ Burn rule of nines (adults):

- Head and neck: 9%
- Each arm: 9%
- Each leg: 18%
- Anterior trunk: 18%
- Posterior trunk: 18%
- Perineum: 1%

✓ Pressure injury stages:

- Stage 1: non-blanchable redness, intact skin
- Stage 2: partial-thickness skin loss
- Stage 3: full-thickness, fat exposed
- Stage 4: bone, muscle, or tendon exposed
- Unstageable: covered by eschar or slough
- Deep tissue injury: persistent non-blanchable deep red, maroon, or purple