Firefighter Drawing: Gear and Pose Construction Guide

Original tasks 1, 2, 3 / complete keys

Task 1

A figure is eight head units tall. The shoulder line is at one and a quarter units and the hip line is at four units. How many head units separate the shoulder and hip lines?

Answer: Two and three-quarter head units.

Reason: Subtract the shoulder position from the hip position: four minus one and a quarter equals two and three-quarter units.

Check: Re-add the difference to the shoulder position: one and a quarter plus two and three-quarter equals four, matching the hip line.

Task 2

A coat is five head units tall with bands at one unit and four units from the hem. A second coat is four head units tall with bands at one unit and three units from the hem. Which coat has the larger band spacing, and by how much?

Answer: The first coat, by one head unit.

Reason: First coat spacing is four minus one equals three units. Second coat spacing is three minus one equals two units. The difference is three minus two equals one unit.

Check: Compare the two differences directly: three units versus two units, so the first is larger by one unit.

Task 3

A raised arm has an upper-arm segment of one and a half head units and a forearm segment of one and a quarter head units. The hand is drawn half a unit beyond the forearm. What is the total length from shoulder to hand tip?

Answer: Three and a quarter head units.

Reason: Add the segments: one and a half plus one and a quarter equals two and three-quarter units. Add the half-unit hand extension: two and three-quarter plus one half equals three and a quarter units.

Check: Subtract the hand extension from the total: three and a quarter minus one half equals two and three-quarter, matching the two limb segments.

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Original tasks 4 / complete keys

Task 4

A figure is eight head units tall. The boots cover the lower one and a half units, and the helmet covers the top one unit. How many head units of the figure are neither helmet nor boots?

Answer: Five and a half head units.

Reason: Add the covered portions: one and a half plus one equals two and a half units. Subtract from the total height: eight minus two and a half equals five and a half units.

Check: Add the uncovered portion to the covered portions: five and a half plus two and a half equals eight, matching the total height.

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Source rubric / reflection

- [ ] Figure height matches the chosen head-unit count within half a unit.
- [ ] Shoulder and hip lines are marked and consistent with the axis.
- [ ] Every limb joint (elbow, knee) is visible.
- [ ] Helmet, coat, gloves, and boots are recognizable.
- [ ] Reflective band spacing is measured and consistent.
- [ ] Labels are legible and follow the baseline-to-midline convention.
- [ ] Alternative styles are accepted if construction and gear clarity are maintained.

Reflection: What did you check, what did you change, and what will you try next?