Athena Simple Drawing: Helmet and Spear Figure Construction

Original tasks 1, 2, 3 / complete keys

Task 1

Using a head-height unit of 3 cm, mark eight units on a 24 cm tall frame. Where does the fourth unit fall, and how much space is left below the eighth unit?

Answer: The fourth unit is at 12 cm from the top. The eighth unit is at 24 cm, so no space is left below it.

Reason: Each unit is 3 cm; four units = 12 cm; eight units = 24 cm, which equals the frame height.

Check: Measure down from the top mark with a ruler and confirm 12 cm and 24 cm.

Task 2

A spear shaft is drawn 16 cm long on a figure whose shoulder line is 14 cm above the ground line. The spear tip is 2 cm above the shoulder line. Describe where the butt of the spear should be placed relative to the ground line, assuming the shaft is vertical. Treat the 14 cm shoulder height as a hypothetical value independent of the eight-unit guide.

Answer: The tip is at 14 cm + 2 cm = 16 cm above the ground. The butt is 16 cm − 16 cm = 0 cm above the ground, so it touches the ground line. This is a hypothetical example; measure your own figure.

Reason: Add the shoulder height and the tip offset to find the tip height above ground: 14 + 2 = 16 cm. Subtract the shaft length from the tip height to find the butt height: 16 − 16 = 0 cm.

Check: Measure the shaft length and the distance from the butt to the ground line; tip height above ground should equal shaft length plus butt height above ground (16 cm = 16 cm + 0 cm).

Task 3

Draw a helmet dome that adds 1.5 cm above a head oval that is 3 cm tall. The face area is the lower 2 cm of the oval. How much of the oval is covered by the helmet if the brim line is at the top of the face area?

Answer: The helmet covers 1 cm of the oval above the brim line, plus the 1.5 cm dome above the oval.

Reason: The oval is 3 cm tall; the face area is the lower 2 cm, so the upper 1 cm is covered by the helmet. The dome adds 1.5 cm above the oval.

Check: Measure the oval height and the face area; subtract to find the covered portion, then add the dome height.

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Original tasks 4 / complete keys

Task 4

A figure is drawn with shoulder width 6 cm and hip width 4.5 cm. The spear is held 1 cm outside the shoulder line. If the frame is 10 cm wide, how much space remains on each side when the figure is centered?

Answer: The figure width including the spear is 6 cm + 1 cm = 7 cm. Centered in a 10 cm frame, 1.5 cm remains on each side.

Reason: Total width is 7 cm; remaining width is 10 − 7 = 3 cm; half on each side is 1.5 cm.

Check: Measure from the frame edge to the figure on both sides; each should be 1.5 cm.

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Source rubric / reflection

- [ ] Proportion guide is marked and the figure fits within the frame.
- [ ] Helmet dome follows the head curve, face remains visible, and brim or cheek guard is present.
- [ ] Spear is straight, clearly separate from the body, and does not cross the face.
- [ ] Pose balances over the feet and body shapes connect without gaps.
- [ ] Line convention is followed: light construction, dark contour, thin details.
- [ ] Valid alternatives in crest shape, grip hand, or spear angle are accepted if the figure remains readable.

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