Pitbull Proportions: Head Width, Chest Depth, and Stance

Original tasks 1, 2, 3 / complete keys

Task 1

A learner uses a unit of 2 cm. The head-to-chest span is 8 units. Calculate head width at 1.2 times the span and chest depth at 0.8 times the span. State both answers in units and in centimeters.

Answer: Head width = 1.2 × 8 = 9.6 units = 19.2 cm. Chest depth = 0.8 × 8 = 6.4 units = 12.8 cm.

Reason: Multiply the span by each ratio, then multiply by the unit size to convert to centimeters. Keep units consistent throughout.

Check: Divide each centimeter answer by 2 to return to units; confirm 19.2 ÷ 2 = 9.6 and 12.8 ÷ 2 = 6.4.

Task 2

Chest width is 7 units. Stance width is set at 1.1 times chest width. The learner draws a stance width of 8.4 units. Is the drawing within ten percent of the target? Show the arithmetic.

Answer: Target stance width = 1.1 × 7 = 7.7 units. Measured ÷ target = 8.4 ÷ 7.7 ≈ 1.09, which is about nine percent above target, so it is within ten percent.

Reason: Compute the target first, then divide the measured value by the target. A result between 0.9 and 1.1 is within ten percent.

Check: Multiply the target by 1.1 to get the upper limit: 7.7 × 1.1 = 8.47. Since 8.4 is below 8.47, the drawing is within the limit.

Task 3

A drawing has head width 10 units and head-to-chest span 9 units. The learner intended head width to be 1.2 times the span. By how many units is the head width off, and what percentage of the target is that?

Answer: Target head width = 1.2 × 9 = 10.8 units. The drawing is 10.8 − 10 = 0.8 units too narrow. As a percentage of target: 0.8 ÷ 10.8 ≈ 0.074, or about 7.4 percent.

Reason: Subtract the measured value from the target to find the difference, then divide the difference by the target to express it as a percentage.

Check: Add the difference back to the measured value: 10 + 0.8 = 10.8, which matches the target.

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Original tasks 4 / complete keys

Task 4

A learner measures chest depth as 6 units and head-to-chest span as 10 units. The intended chest-depth ratio is 0.8 times the span. Is the chest too shallow or too deep, and by what percentage of the target?

Answer: Target chest depth = 0.8 × 10 = 8 units. The drawing is 8 − 6 = 2 units too shallow. As a percentage of target: 2 ÷ 8 = 0.25, or 25 percent too shallow.

Reason: Compare the measured depth to the target. A measured value below target means the chest is too shallow; divide the difference by the target for the percentage.

Check: Multiply the target by 0.75 to confirm the measured value: 8 × 0.75 = 6, which matches the drawing.

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Source rubric / reflection

- [ ] Head width is measured at the cheeks and recorded in consistent units.
- [ ] Chest depth is visibly greater than head height and measured from shoulder top to lowest chest point.
- [ ] Stance width is slightly wider than chest width and front legs align under the shoulders.
- [ ] All measurements use the same unit, and any adjustment is justified by a simple ratio check.
- [ ] The final silhouette reads as a pitbull from a distance, with a thick neck and broad chest.

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