Draw a Shoulder Press Pose: Arm-Raise Angles and Joint Guides

Original tasks 1, 2 / complete keys

Task 1

On a blank page, draw a baseline and a midline. Mark a shoulder joint at 5 cm above the baseline and a hand at 9 cm above the baseline. Draw an upper arm at 90 degrees from the baseline and a forearm continuing to the hand. Label the shoulder angle and the elbow angle using your convention.

Answer: The upper arm is vertical at 90 degrees. The forearm continues upward, so the elbow angle is close to 180 degrees if the arm is straight. The hand is 4 cm above the shoulder. Any clear labeling of the chosen angles is acceptable.

Reason: The shoulder angle is measured from the baseline to the upper arm. A vertical upper arm gives 90 degrees. The elbow angle is measured between the upper arm and forearm; a straight arm gives about 180 degrees.

Check: Measure the hand height minus the shoulder height: 9 cm minus 5 cm equals 4 cm. Confirm the upper arm is vertical and the labels match the convention.

Task 2

A practice box is 12 cm tall. The head top is at 8 cm from the bottom edge, the shoulder is at 6 cm, the elbow at the bottom position is at 5 cm, and the hand at the top position is at 11 cm. Check the vertical order and state whether the top hand is above the head.

Answer: The vertical order from bottom to top is elbow at 5 cm, shoulder at 6 cm, head top at 8 cm, hand at 11 cm. The hand is above the head by 3 cm. The order is consistent with a shoulder press pose.

Reason: The elbow should be near shoulder height, and the hand should be above the head. The numbers satisfy both conditions.

Check: Subtract heights: hand minus head equals 11 minus 8 equals 3 cm. Elbow minus shoulder equals 5 minus 6 equals negative 1 cm, so the elbow is 1 cm below the shoulder, which is near shoulder height.

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Original tasks 3, 4 / complete keys

Task 3

Draw two arm-raise arrows on a sketch. The first arrow represents a hand movement of 5 cm. The second arrow represents a hand movement of 10 cm. If the first arrow is drawn 5 cm long, how long should the second arrow be to keep the same scale? State the scale.

Answer: The scale is 1 cm of arrow per 1 cm of hand movement. The second arrow should be 10 cm long.

Reason: The first arrow sets the scale: 5 cm arrow for 5 cm movement. Applying the same scale to 10 cm movement gives 10 cm arrow.

Check: Divide arrow length by movement: 5 divided by 5 equals 1. Multiply the second movement by the scale: 10 times 1 equals 10 cm.

Task 4

A sketch shows the left hand at 7 cm above the baseline and the right hand at 9 cm above the baseline. The head top is at 8 cm. Is either hand below the head? If the drawing is meant to be symmetric, what adjustment would you make?

Answer: The left hand at 7 cm is below the head top at 8 cm. The right hand at 9 cm is above the head. For a symmetric pose, raise the left hand by at least 1 cm so it is above the head, or lower the right hand to match, depending on the chosen convention.

Reason: Compare each hand height to the head height. The left hand is 1 cm below the head, so it fails the top-position check. Symmetry requires both hands to satisfy the same check.

Check: Subtract head height from each hand: left 7 minus 8 equals negative 1 cm; right 9 minus 8 equals positive 1 cm. A positive result means the hand is above the head.

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Source rubric / reflection

- [ ] The drawing uses a stated angle convention measured from a baseline.
- [ ] The top hand position is above the head.
- [ ] The bottom elbow position is near shoulder height.
- [ ] Arm-raise arrows are present and their lengths match the hand movement on the page.
- [ ] Joint-angle guides are labeled at the shoulders and elbows.
- [ ] Left and right sides are either symmetric or the asymmetry is clearly labeled.
- [ ] Dumbbells are simple shapes at the hands, not equipment construction.
- [ ] The practice box is used to check vertical order and then removed or left light.

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