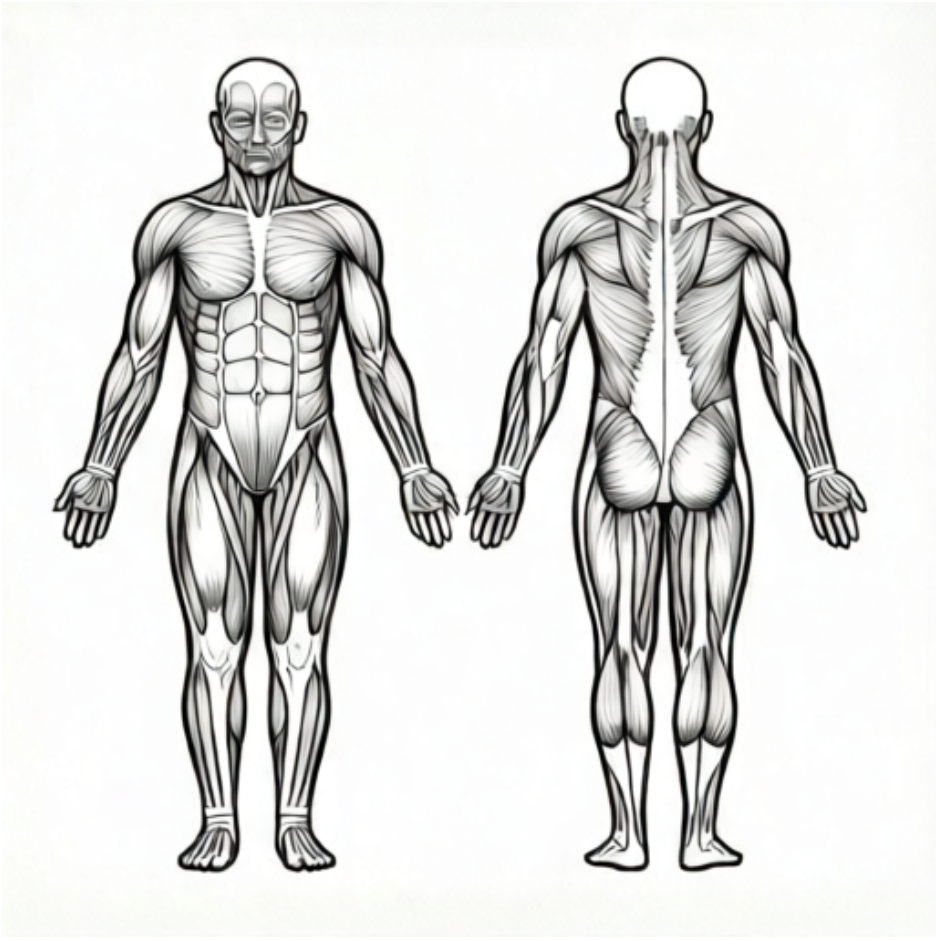
Drawing Poses Upside Down: Using Proportion Landmarks to Rotate Figures

Ordinary topic reference / separately checked pixels



Drawing Poses Upside Down: Using Proportion Landmarks to Rotate Figures

Original worked example / unchanged complete key

Prompt: An upright standing figure has these hypothetical landmark distances: head top to chin = 3 cm, shoulder to elbow = 4 cm, hip to knee = 5 cm, knee to ankle = 5 cm. The figure is rotated 180 degrees in place. Describe the inverted landmark order and state whether the distances change.

Answer: The inverted order from top to bottom becomes ankle, knee, hip, elbow, shoulder, chin, head top. The distances do not change: head top to chin remains 3 cm, shoulder to elbow 4 cm, hip to knee 5 cm, and knee to ankle 5 cm. The joint angles also remain the same, only their orientation flips.

Reason: A 180-degree rotation reverses vertical order while preserving distances between points. Because the figure rotates in place, left and right body sides stay attached to the body. The checklist confirms that landmark order is swapped and distances are unchanged.

Check: Measure each distance on the inverted drawing with a ruler in centimeters and compare to the upright values. Then flip the upright drawing 180 degrees and overlay the landmark points; they should coincide.