Suit and Tie Drawing: Lapels, Knot and Figure Construction

Original tasks 1, 2 / complete keys

Task 1

On a 200-millimeter-tall figure, the shoulder line is 50 millimeters wide and the waist is 100 millimeters below the shoulder. Place the top button at three-fifths of the shoulder-to-waist distance. State the button position and a hypothetical lapel width at the chest equal to one-quarter of the shoulder width.

Answer: The top button is 60 millimeters below the shoulder line (three-fifths of 100 millimeters). A hypothetical lapel width at the chest is 12.5 millimeters (one-quarter of 50 millimeters).

Reason: Multiply the shoulder-to-waist distance by the fraction for the button. Multiply shoulder width by the lapel fraction. Keep units in millimeters.

Check: Verify that 60 plus 40 equals 100 millimeters, and that four times 12.5 equals 50 millimeters.

Task 2

A collar width is 30 millimeters. Draw a tie knot whose top width is one-third of the collar width and whose height is half its top width. State both dimensions and the bottom width if it is two-thirds of the top width.

Answer: Top width is 10 millimeters. Height is 5 millimeters. Bottom width is about 6.7 millimeters (two-thirds of 10, rounded).

Reason: Divide collar width by three for top width. Halve top width for height. Multiply top width by two-thirds for bottom width.

Check: Check that three times 10 equals 30 millimeters, that two times 5 equals 10 millimeters, and that 6.7 is between 0 and 10 millimeters.

Suit and Tie Drawing: Lapels, Knot and Figure Construction

Original tasks 3, 4 / complete keys

Task 3

A jacket V runs from a collar point 20 millimeters above the top button to the button itself. The left lapel edge is 8 millimeters from the center line at the chest, and the right lapel edge is 11 millimeters from the center line at the same height. Describe the symmetry problem and one correction.

Answer: The lapels are not symmetrical: the right edge is 3 millimeters farther from the center line than the left. Move the right lapel edge inward by 3 millimeters, or move the left outward by 3 millimeters, so both measure the same distance.

Reason: Subtract the smaller distance from the larger: 11 minus 8 equals 3 millimeters. Symmetry requires equal distances from the center line at the same height.

Check: Re-measure both distances after correction; they should match within your chosen tolerance, such as two millimeters.

Task 4

A figure is 160 millimeters tall. The shoulder line is 36 millimeters wide. The top button is 45 millimeters below the shoulder. The tie knot top width is 9 millimeters. Check whether the knot is centered if its left edge is 4.5 millimeters from the center line and its right edge is 4.5 millimeters from the center line. Also state a hypothetical lapel width at the chest equal to one-third of shoulder width.

Answer: The knot is centered because both edges are 4.5 millimeters from the center line, and 4.5 plus 4.5 equals the 9-millimeter top width. A hypothetical lapel width at the chest is 12 millimeters (one-third of 36 millimeters).

Reason: Centering means equal distances from the center line on both sides. The knot width equals the sum of the two edge distances. Lapel width is shoulder width divided by three.

Check: Verify that 4.5 equals 4.5, that 4.5 plus 4.5 equals 9, and that three times 12 equals 36 millimeters.

Suit and Tie Drawing: Lapels, Knot and Figure Construction

Source rubric / reflection

- [ ] Figure center line passes through chin, sternum, and top button.
- [ ] Jacket V is narrow and symmetrical around the center line.
- [ ] Lapels include a notch and mirror each other within a chosen tolerance.
- [ ] Collar band sits behind the lapels and above the tie knot.
- [ ] Tie knot is centered, sits below the collar, and is proportionally related to collar width.
- [ ] Tie body stays centered and tapers consistently.
- [ ] Final lines are clean and construction lines are light or removed.
- [ ] Labels, if used, follow the baseline-to-midline x-height convention and are legible; alternative letter styles are acceptable.

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