How to Draw a Pleated Skirt Upside Down: A Construction Guide

Original tasks 1, 2 / complete keys

Task 1

Draw an upside-down pleated skirt with 4 pleats, hem width 8 cm, waistband width 6 cm, and length 7 cm. Use equal bands.

Answer: Hem band = 2 cm; waistband band = 1.5 cm. Four bands each, connected from hem to waist, with alternating fold offsets.

Reason: 8 ÷ 4 = 2 and 6 ÷ 4 = 1.5. The center guide divides the skirt into two mirrored halves of two bands each.

Check: Measure two hem bands and confirm each is 2 cm; measure two waistband bands and confirm each is 1.5 cm; count two bands on each side of the center guide.

Task 2

Draw an upside-down pleated skirt with 10 pleats, hem width 20 cm, waistband width 15 cm, and length 12 cm. Allow one band to be 10 percent wider than the others and note it.

Answer: Base hem band = 2 cm. Make one band 2.2 cm (10 percent wider) and reduce another band to 1.8 cm so the hem total stays 20 cm. Base waistband band = 1.5 cm. Make the corresponding waistband band 1.65 cm and reduce another to 1.35 cm so the waistband total stays 15 cm. Place the 2.2 cm band and the 1.8 cm band on opposite sides of the center guide, and note the wider band in the margin.

Reason: 20 ÷ 10 = 2 and 15 ÷ 10 = 1.5. A 10 percent increase gives 2.2 cm at the hem and 1.65 cm at the waistband. Compensating with a matching reduction in another band keeps each total exact, and the margin note makes the variation intentional for the rubric.

Check: Sum the hem bands: eight at 2 cm, one at 2.2 cm, and one at 1.8 cm equals 20 cm. Sum the waistband bands: eight at 1.5 cm, one at 1.65 cm, and one at 1.35 cm equals 15 cm. Confirm the wider band is noted in the margin and that the 2.2 cm band and the 1.8 cm band are on opposite sides of the center guide (e.g., one in the left five bands and one in the right five bands). Because the variation is intentional and noted, the rubric's symmetry tolerance does not apply to this exercise.

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Original tasks 3, 4 / complete keys

Task 3

Draw an upside-down pleated skirt with 6 pleats, hem width 9 cm, waistband width 9 cm, and length 8 cm. Use equal bands and a straight silhouette.

Answer: Hem band = 1.5 cm; waistband band = 1.5 cm. Six equal vertical bands from hem to waist, with alternating fold offsets.

Reason: 9 ÷ 6 = 1.5 for both hem and waistband, so the pleat edges are vertical. The center guide still divides the skirt into two halves of three bands.

Check: Measure three hem bands and confirm each is 1.5 cm; confirm the waistband bands are also 1.5 cm; check that the left and right band counts are both three.

Task 4

Draw an upside-down pleated skirt with 8 pleats, hem width 16 cm, waistband width 12 cm, and length 10 cm. Use a slight hem curve of 1 cm depth at the center and keep the baseline visible.

Answer: Hem band = 2 cm; waistband band = 1.5 cm. Draw the curved hem 1 cm below the baseline at the center, then build eight bands upward to the waistband.

Reason: 16 ÷ 8 = 2 and 12 ÷ 8 = 1.5. The curve is a stylistic alternative; the baseline remains for checking band widths.

Check: Measure the straight-line distance between band marks along the baseline, not the curve; confirm eight bands and that the curve depth is about 1 cm at the center.

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Source rubric / reflection

- [ ] Hem baseline and waistband midline are present and parallel.
- [ ] Pleat count matches the chosen number and is consistent on both sides.
- [ ] Band widths along the hem sum to the hem width within 2 mm.
- [ ] Band widths along the waistband sum to the waistband width within 2 mm.
- [ ] Fold lines alternate direction and do not cross the center guide.
- [ ] Valid alternatives such as slight curves or up to 10 percent band variation are accepted if noted.

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