Draw an Actual-Size Cat Paw Print: Pad and Toe Geometry

Original task 1 / independent drawing and calculation

Task 1

Draw an actual-size print using these hypothetical values: print 50 mm wide, 55 mm tall; main pad 24 mm by 18 mm; toe pads 12 mm by 14 mm; inner toe centers 14 mm from center, outer 19 mm; toe centers 30 mm above main pad top; claw marks 4 mm long with 2 mm gap. Check left-right symmetry and record all measurements.

Keep the original task measurements. Use the full drawing sheet in this PDF for a response needing more room; use the stated paper size when a task specifies larger paper.

Draw an Actual-Size Cat Paw Print: Pad and Toe Geometry

Original task 2 / independent drawing and calculation

Task 2

Redraw the worked example at half scale. List every half-scale measurement and verify each is exactly half the actual-size value.

Keep the original task measurements. Use the full drawing sheet in this PDF for a response needing more room; use the stated paper size when a task specifies larger paper.

Draw an Actual-Size Cat Paw Print: Pad and Toe Geometry

Original task 3 / independent drawing and calculation

Task 3

A student draws a print with toe centers at 10 mm, 15 mm, 15 mm, and 10 mm from the center line, all 20 mm above the main pad top. The main pad is 18 mm wide and 14 mm tall. Identify one symmetry error and one possible correction, then state a check method.

Keep the original task measurements. Use the full drawing sheet in this PDF for a response needing more room; use the stated paper size when a task specifies larger paper.

Draw an Actual-Size Cat Paw Print: Pad and Toe Geometry

Original task 4 / independent drawing and calculation

Task 4

Design a half-scale check for a print with actual-size main pad 22 mm by 16 mm, toe pads 11 mm by 13 mm, toe centers 13 mm and 19 mm from center, 27 mm above main pad top, and claw marks 3.5 mm long with 1.5 mm gap. State the half-scale values and one arithmetic check.

Keep the original task measurements. Use the full drawing sheet in this PDF for a response needing more room; use the stated paper size when a task specifies larger paper.

Full drawing sheet / reusable blank workspace

Reusable full drawing sheet for Tasks 1 to 4. Print another copy when needed. Keep all original task measurements; if a task specifies larger paper, use that paper size.