Latte Art Drawing: Cup Rim, Foam Contrast, and Pour Patterns

Original tasks 1, 2 / complete keys

Task 1

Draw a cup rim ellipse with a hypothetical major axis of 12 cm and minor axis of 5 cm. Mark the center, both axes, and a vertical centerline. State the distance from the center to each axis endpoint.

Answer: The major axis endpoints are 6 cm from the center; the minor axis endpoints are 2.5 cm from the center. The ellipse is wider than it is tall, consistent with a pouring view.

Reason: An ellipse's axes are bisected by the center, so each endpoint lies half the axis length from the center. Using consistent units (cm) makes the check simple.

Check: Measure each endpoint distance with a ruler; confirm 6 cm horizontally and 2.5 cm vertically, and that opposite endpoints are equal.

Task 2

Inside a rim ellipse, sketch a rosetta with a central stem and three pairs of lobes. Each lobe should be 1.0 cm wide at its widest. State the total width of the rosetta at the widest pair and check that it fits inside a 10 cm wide ellipse with at least 1 cm margin on each side.

Answer: Three pairs of lobes give six lobes. At 1.0 cm each, the total width is 6 x 1.0 cm = 6 cm. A 10 cm ellipse leaves (10 - 6) / 2 = 2 cm margin on each side, which is more than 1 cm, so it fits.

Reason: Width is the sum of lobe widths across the pattern: 6 lobes x 1.0 cm = 6 cm. Subtracting the pattern width from the ellipse width and dividing by two gives the side margin: (10 - 6) / 2 = 2 cm.

Check: Measure the widest lobe pair and the ellipse width; confirm the total pattern width is 6 cm and the margin on each side is 2 cm, which is at least 1 cm.

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Original tasks 3, 4 / complete keys

Task 3

Create a contrast map for a tulip pattern inside a 10 cm wide ellipse. Label three zones: light foam, mid foam, dark espresso. State one hypothetical width for the light zone and one for the dark zone, using the same unit, and check that the light zone is narrower than the dark zone and that both zones fit inside the ellipse.

Answer: Example: light zone 2 cm wide, dark zone 4 cm wide inside a 10 cm ellipse. The light zone is narrower than the dark zone ($2 < 4$), and both zones fit: $2 + 4 = 6$ cm, leaving $(10 - 6) / 2 = 2$ cm margins on each side. The tulip reads as a bright shape against darker foam.

Reason: Contrast depends on relative areas and values. Keeping the light zone smaller and unshaded makes the pattern stand out without outlines. Checking the widths against the ellipse width confirms the zones fit and the light zone is narrower.

Check: Measure the labeled zones and the ellipse width; confirm the light zone width is less than the dark zone width, that the two widths sum to less than the ellipse width, and that three distinct labels are present.

Task 4

Draw a heart pattern inside an ellipse with a vertical centerline. The heart's top curve is 1 cm below the rim's top edge and its point is 1 cm above the rim's bottom edge. The ellipse minor axis is 4 cm. State the heart's vertical height and check that it equals the minor axis minus the two margins.

Answer: Heart height = 4 cm - 1 cm - 1 cm = 2 cm. The heart spans 2 cm vertically, centered between the margins.

Reason: Vertical height is the minor axis length minus the top and bottom margins. Subtracting both margins from the axis gives the available height.

Check: Measure the heart's vertical span and the two margins; confirm they add to the minor axis length ($1 + 2 + 1 = 4$ cm).

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Source rubric / reflection

- [ ] Cup rim is drawn as an ellipse with a shorter minor axis and clear major and minor axes.
- [ ] Pattern is centered and symmetric about the vertical centerline, with measured margins inside the ellipse.
- [ ] Contrast map uses at least three distinct tonal zones: light foam, mid foam, dark espresso.
- [ ] Pattern shape reads clearly as rosetta, heart, or tulip without relying on a hard outline.
- [ ] A consistent x-height is chosen for pattern elements and applied throughout the chosen pattern.
- [ ] Valid alternatives are accepted: lobes may be rounded or pointed, hearts wide or narrow, tulip bulbs circular or oval, provided symmetry, readability, and consistent x-height are maintained.

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