Contour Line Chrysanthemum: Petal Steps and Layering

Topic reference / ordinary illustration



Ordinary topic reference. Hypothetical dimensions in the four tasks are supplied in their own text; this illustration is not their measured answer.

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Worked example / complete source key

On a 200 mm by 250 mm page, plan a chrysanthemum bloom with a 100 mm diameter centered with equal side margins. Use three petal layers with 10 outer, 8 middle, and 6 inner petals. Describe the first three outer petal edges and one overlap step.

Answer: Side margins are (200 - 100) / 2 = 50 mm each. Top and bottom margins are (250 - 100) / 2 = 75 mm each when centered vertically. Mark the center at 100 mm from each side and 125 mm from top and bottom. Draw a faint 100 mm diameter circle. Mark 10 outer tips at staggered intervals around the circle. Draw outer petal 1 from its base near the center to its tip and back to the base as one continuous edge. Draw outer petal 2 similarly, and where its edge crosses petal 1's edge, step over petal 1 with a short crossing segment, then continue. Draw outer petal 3, stepping over petal 2 where they overlap. Check that each drawn petal has a base, a tip, and a visible step at each overlap.