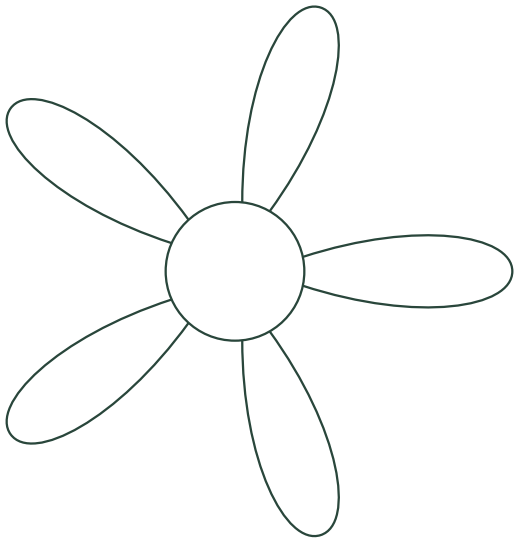
Draw a Flat 2D Flower: Simplified Petal Method

EXERCISE 1 / ANSWERS

Draw a flat 2D flower with five simplified petals. Use a center circle and equal angular spacing. State your hypothetical center radius and petal length in centimeters.

5 petals / spacing 72 degrees



One valid example: r=1 cm; L=3 cm. Illustration is reduced, not a ruler.

A drawing with one center circle and five outline petals spaced at 72-degree intervals, using one consistent petal width and length convention.

Why: Five petals require 360 divided by 5 equals 72 degrees between neighboring petal guides. The center circle anchors each petal, and the outline-only convention keeps the flower flat.

Check: Count five petals; estimate or measure the angle between neighbors as about 72 degrees; confirm no shading and no overlapping petals.

Use the same narrow rounded profile for each petal. In these examples each base meets the center circle at 12 degrees either side of its guide. Other consistent widths and tip styles are valid if petals do not cross.

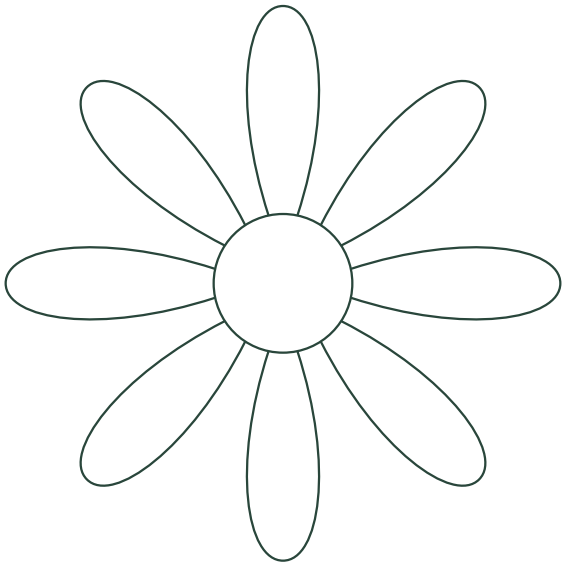
Illustrations are reduced. Five-petal guides: 0,72,144,216,288 degrees; eight-petal guides: 0,45,90,135,180,225,270,315 degrees.

Draw a Flat 2D Flower: Simplified Petal Method

EXERCISE 2 / ANSWERS

Draw a flat 2D flower with eight simplified petals. Use a center circle and equal angular spacing. Keep all petals outline-only.

8 petals / spacing 45 degrees



One valid example: r=1 cm; L=3 cm. Illustration is reduced, not a ruler.

A drawing with one center circle and eight outline petals spaced at 45-degree intervals, using a consistent simplified petal shape.

Why: Eight petals require 360 divided by 8 equals 45 degrees between neighboring guides. Equal spacing and one petal convention produce a balanced flat flower.

Check: Count eight petals; check that neighboring petals are about 45 degrees apart; verify all petals touch the center circle and no guide lines remain visible.

Use the same narrow rounded profile for each petal. In these examples each base meets the center circle at 12 degrees either side of its guide. Other consistent widths and tip styles are valid if petals do not cross.

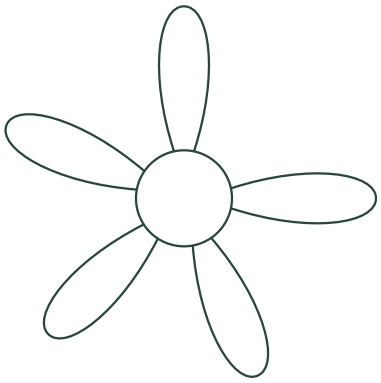
Illustrations are reduced. Five-petal guides: 0,72,144,216,288 degrees; eight-petal guides: 0,45,90,135,180,225,270,315 degrees.

Draw a Flat 2D Flower: Simplified Petal Method

EXERCISE 3 / ANSWERS

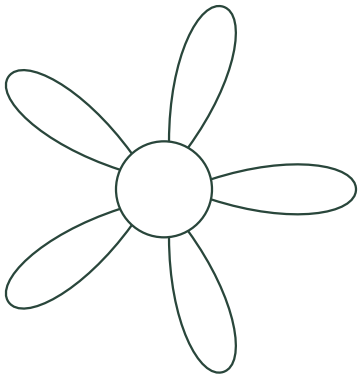
A learner draws a five-petal flower but two neighboring petals are about 90 degrees apart while the others are closer. Describe how to fix the spacing using arithmetic and a guide mark.

Given: one 90-degree gap



Other gaps 67.5 degrees

5 petals / 72 degrees



Correct: five equal 72-degree gaps

Same rounded side profile; base attachments at +/-12 degrees from each guide.

Recalculate 360 divided by 5 equals 72 degrees. Erase the uneven petal guides and re-mark five ticks at 72-degree intervals, then redraw the affected petals to the new ticks.

Why: The correct spacing for five petals is 72 degrees. The 90-degree gap is too wide, so re-marking equal intervals restores balance before redrawing contours.

Check: After redrawing, measure or estimate each neighboring gap as about 72 degrees and confirm five petals remain.

Use the same narrow rounded profile for each petal. In these examples each base meets the center circle at 12 degrees either side of its guide. Other consistent widths and tip styles are valid if petals do not cross.

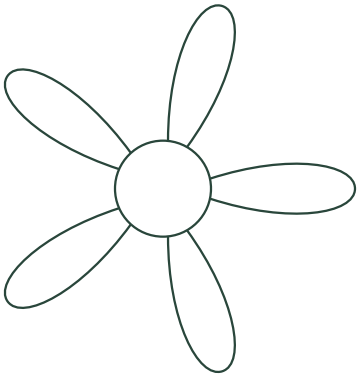
Illustrations are reduced. Five-petal guides: 0,72,144,216,288 degrees; eight-petal guides: 0,45,90,135,180,225,270,315 degrees.

Draw a Flat 2D Flower: Simplified Petal Method

EXERCISE 4 / ANSWERS

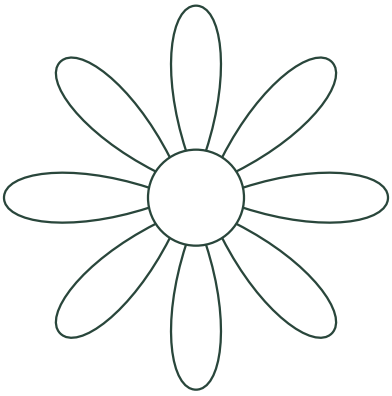
Draw two flat 2D flowers side by side: one with five petals and one with eight petals. Use the same petal width convention for both, but you may vary the petal tip shape between the two flowers. Label each flower with its petal count.

5 petals / 72 degrees



Same width rule; rounded tips

8 petals / 45 degrees



Same width rule; rounded tips

Same rounded side profile; base attachments at +/-12 degrees from each guide.

Two outline-only flowers: a five-petal flower with 72-degree spacing and an eight-petal flower with 45-degree spacing, each labeled and using a stated petal width convention.

Why: The petal count determines the angular spacing. Using one width convention per flower keeps the simplified shapes consistent, while allowing a different tip style between flowers is a valid alternative under the rubric.

Check: Count five and eight petals respectively; check spacing near 72 and 45 degrees; confirm labels, outline-only lines, and no overlapping petals.

Use the same narrow rounded profile for each petal. In these examples each base meets the center circle at 12 degrees either side of its guide. Other consistent widths and tip styles are valid if petals do not cross.

Illustrations are reduced. Five-petal guides: 0,72,144,216,288 degrees; eight-petal guides: 0,45,90,135,180,225,270,315 degrees.