

Lines of Symmetry

Geometry · Grade 4

● Easy · 12 Questions

Solve each problem. Show your work in the space provided. Write your answer on the line.

1. How many lines of symmetry does a square have?

Answer: _____

2. How many lines of symmetry does a rectangle (non-square) have?

Answer: _____

3. How many lines of symmetry does an equilateral triangle have?

Answer: _____

4. Does a circle have a line of symmetry?
How many does it have?

Answer: _____

5. Which capital letter has a vertical line of symmetry?
A, B, C, D

Answer: _____

6. Does the letter S have a line of symmetry?

Answer: _____

7. How many lines of symmetry does a regular pentagon have?

Answer: _____

8. True or False: A parallelogram (non-rectangle) has a line of symmetry.

Answer: _____

- 9.** How many lines of symmetry does a regular hexagon have?

Answer: _____

- 10.** A shape is folded in half and both halves match exactly.
What type of symmetry does it have?

Answer: _____

- 11.** Is the letter K symmetric? If yes, name the type.

Answer: _____

12. How many lines of symmetry does a regular octagon have?

Answer: _____

Answer Key

Lines of Symmetry — Easy

1. 4

A square has 4 lines of symmetry: 2 through opposite corners (diagonals) and 2 through midpoints of opposite sides.

2. 2

A rectangle has 2 lines of symmetry: one horizontal and one vertical through the midpoints of opposite sides.

3. 3

An equilateral triangle (all sides equal) has 3 lines of symmetry — one from each vertex to the midpoint of the opposite side.

4. **Yes — infinitely many lines of symmetry (any diameter).**

Any straight line through the centre of a circle is a line of symmetry. There are infinitely many.

5. A

A can be folded in half vertically to match. B, C, D have horizontal symmetry instead.

6. No

The letter S looks the same when rotated 180° (rotational symmetry) but has no line of symmetry.

7. 5

A regular polygon with n sides has n lines of symmetry. Pentagon: 5 sides $\rightarrow$ 5 lines.

8. False

A general parallelogram has NO line of symmetry. Its opposite sides are parallel but it cannot be folded to match itself.

9. 6

A regular hexagon has 6 lines of symmetry: 3 through opposite vertices and 3 through midpoints of opposite sides.

10. Line symmetry (also called reflective symmetry).

When a shape can be folded so both halves match, it has line (reflective) symmetry.

11. Yes — K has horizontal line symmetry (folds along a horizontal line).

K can be folded along a horizontal line through its middle so the top and bottom halves match.

12. 8

A regular polygon with n sides has n lines of symmetry. Octagon: 8 sides $\rightarrow$ 8 lines.
