

Y4 Lines of Symmetry

KS2 Y4 Maths · Follows the national curriculum

Name _____ Class _____ Date _____

1. Worked example

How many lines of symmetry does a rectangle (not a square) have?

Step 1 · Fold it top to bottom

The halves match ✓

Step 2 · Fold it side to side

The halves match ✓

Step 3 · Fold it corner to corner

The halves do not match ✗

Answer: A rectangle has 2 lines of symmetry

Check: Cut a rectangle out of paper and test each fold ✓

2. Now try one with the steps

How many lines of symmetry does a square have?

Step 1 · Vertical and horizontal folds

Step 2 · Both diagonal folds

Answer:

3. Practice

Have a go at each one. There is space underneath to work it out.

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

2. How many lines of symmetry does a rectangle (not a square) have?

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

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

5. How many lines of symmetry does a scalene triangle have?

6. How many lines of symmetry does a kite have?

7. Does the capital letter H have a horizontal line of symmetry? Write yes or no.

8. Does the capital letter F have any lines of symmetry? Write yes or no.

9. How many lines of symmetry does a rhombus (not a square) have?

10. How many lines of symmetry does a parallelogram (not a rectangle or rhombus) have?

11. How many lines of symmetry does a regular hexagon have?

12. Which letter has both a vertical and a horizontal line of symmetry: E, X or V?

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

14. Sami says a rectangle has 4 lines of symmetry because it has 4 sides. Is he right? Write yes or no.

4. Before you hand it in

Saying a rectangle's diagonals are lines of symmetry.

Cutting into two equal-sized halves is not enough: the halves must match exactly when folded. Fold a paper rectangle corner to corner and see the overlap.

Thinking every shape has at least one line of symmetry.

Some shapes have none, such parallelogram or a scalene triangle.

Only looking for vertical lines of symmetry.

Try vertical, horizontal and diagonal folds. Turn the shape round.

Thinking the number of lines of symmetry always equals the number of sides.

That is true for regular shapes, but not others: a rectangle has 4 sides and 2 lines.