

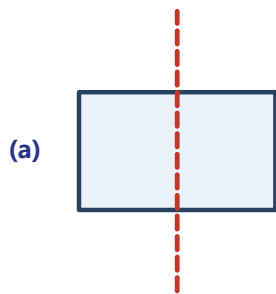
## Year 4: Lines of symmetry: answers

Year 4 - Shapes, Angles and Symmetry - Lesson 9.6

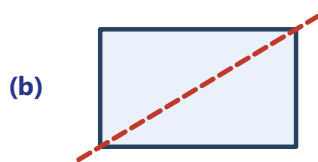
**Answers.** Final answers to the worksheet questions. Full step-by-step solutions for every question are free at [websink.site/ks2-sats/maths/year-4/ch09-shapes-angles-symmetry/lines-of-symmetry/](https://websink.site/ks2-sats/maths/year-4/ch09-shapes-angles-symmetry/lines-of-symmetry/)

### Exercise 9G Lines of symmetry Non-calculator

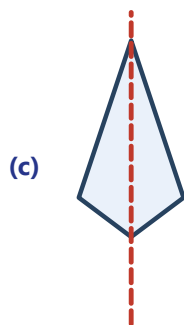
**1** Is the dashed line a line of symmetry? Write **yes** or **no**.



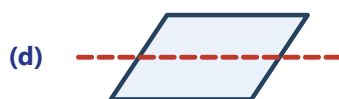
**Answer:** Yes



**Answer:** No

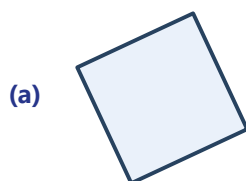


**Answer:** Yes



**Answer:** No

**2** How many lines of symmetry does each shape have?



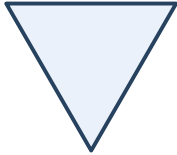
**Answer:** 4

(b)



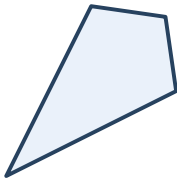
Answer: 2

(c)



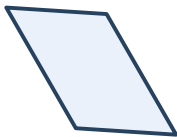
Answer: 3

(d)



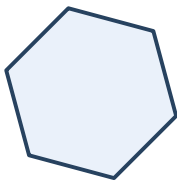
Answer: 1

(e)



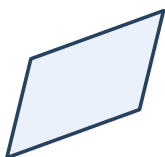
Answer: 0

(f)

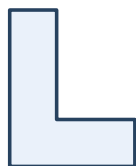


Answer: 6

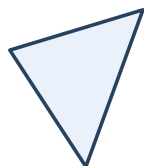
3 Which shapes have **no** lines of symmetry? Write the letters.



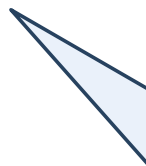
A



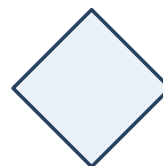
B



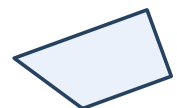
C



D



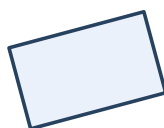
E



F

Answer: A, B, D and F

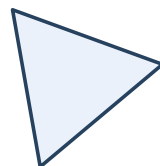
4 Which shape has exactly **one** line of symmetry? Write the letter.



A



B



C



D

**Answer: B**

**5** How many lines of symmetry does each letter have?

(a) **H**

**Answer: 2**

(b) **A**

**Answer: 1**

(c) **Z**

**Answer: 0**

(d) **C**

**Answer: 1**

**6** Look at these capital letters. Write the letters that have...

**A D E H M N T V W Z**  
**A D E H M N T V W Z**

(a) a vertical line of symmetry (up and down)

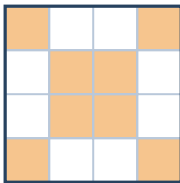
**Answer: A, H, M, T, V, W**

(b) a horizontal line of symmetry (across)

**Answer: D, E, H**

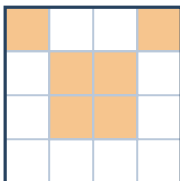
**7** How many lines of symmetry does each pattern have? Remember the diagonal lines.

(a)



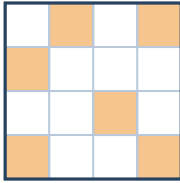
**Answer: 4**

(b)



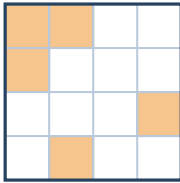
**Answer: 1**

(c)



Answer: 1

(d)



Answer: 0

8 How many lines of symmetry does each regular polygon have?

(a) a regular heptagon

Answer: 7

(b) a regular octagon

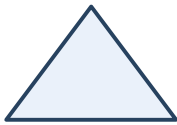
Answer: 8

(c) a regular decagon

Answer: 10

9 Each shape has one line of symmetry. Is the line **vertical**, **horizontal** or **sloping**?

(a)



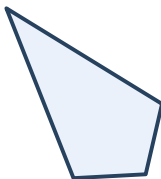
Answer: vertical

(b)



Answer: horizontal

(c)



Answer: sloping

10 Ravi folds a square piece of paper so that the two halves match exactly. How many different folds can he make?

Answer: 4

11 Ali says, "A rectangle has 4 lines of symmetry: 2 diagonals and 2 middle lines." Do you agree? Explain.



**Answer:** No. The diagonals are not lines of symmetry. A rectangle has 2

**12** Write **always**, **sometimes** or **never** for each sentence.

- (a) A shape with four equal sides has four lines of symmetry.

**Answer:** Sometimes

- (b) A regular polygon has the same number of lines of symmetry as sides.

**Answer:** Always

**13** Which shape am I? "I have 4 sides. My sides are not all the same length. I have two lines of symmetry."

**Answer:** rectangle