

# LINEAR SYMMETRY

# 17

**Q1. Match the quadrilateral with the number of lines of symmetry each of them has:**

Quadrilateral	Number of lines of symmetry
Square	0
Rectangle	1
Kite	2
Trapezium	4

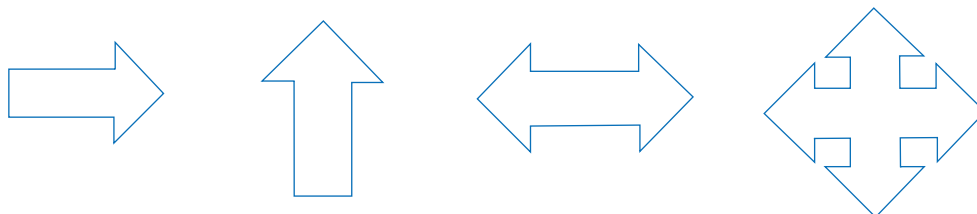
**Q2. Fill in the blanks:**

- A regular hexagon has \_\_\_\_\_ lines of symmetry.
- A semi-circle has \_\_\_\_\_ line(s) of symmetry.
- A \_\_\_\_\_ is a quadrilateral having all sides equal and only two lines of symmetry.
- A regular \_\_\_\_\_ has 8 lines of symmetry.

**Q3. Write the odd number(s) from 2 to 9 which have at least one line of symmetry.**

Answer: \_\_\_\_\_

**Q4. In the following figures draw the lines of symmetry for the figures which have at least two lines of symmetry:**



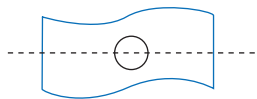
**Q5. State true or false:**

- In the English alphabet only one vowel has no line of symmetry. \_\_\_\_\_
- All hexagons have 6 lines of symmetry. \_\_\_\_\_
- All the diameters of a circle are its line of symmetry. \_\_\_\_\_
- All the diagonals of a rectangle are its line of symmetry. \_\_\_\_\_

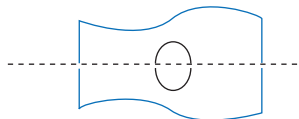
**Q6. Choose the correct mirror image of the following figure if the dotted line is the mirror line:**



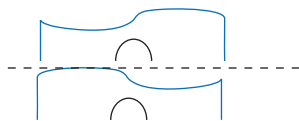
a.



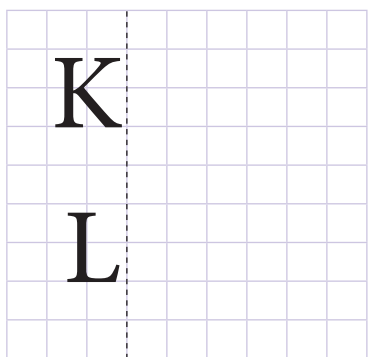
b.



c.



**Q7. Draw the reflection of the following letters about the vertical line as mirror line:**



**Q8. List any two letters of the English alphabet that have:**

- a. Only vertical line of symmetry : \_\_\_\_\_
- b. Both vertical and horizontal lines of symmetry : \_\_\_\_\_

**Q9. Construct  $\angle XYZ = 60^\circ$  and draw its line of symmetry.**

**Q10. Give one word for:**

- a. The line of symmetry of a circle: \_\_\_\_\_
- b. The line of symmetry of an angle: \_\_\_\_\_

## ANSWERS

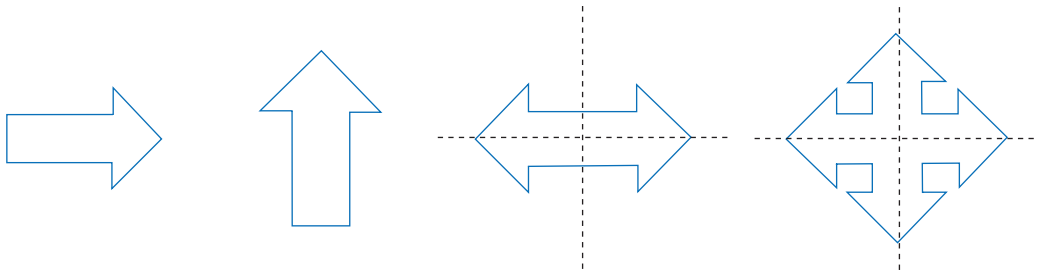
1.

Quadrilateral	Number of lines of symmetry
Square	4
Rectangle	2
Kite	1
Trapezium	0

2. a. 6,    b. 1,    c. rhombus,    d. octagon

3. 3

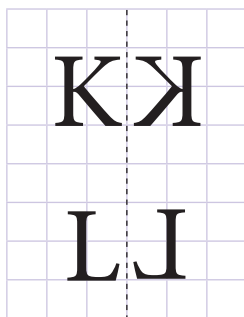
4.



5. a. False,    b. False,    c. True,    d. False

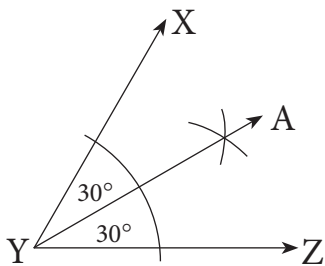
6. (b) is correct

7.



8. a. A, M;    b. O, H

9.



YA is the line of symmetry of  $\angle XYZ$ .

10. a. Diameter,    b. Angle bisector