

# CHAPTER 12

## SYMMETRY (REFLECTION)

### More Questions for Practice

1. Sketch the following figures and draw at least one line of symmetry:

(a) A rectangle

(b) An isosceles triangle

(c) A kite

2. Draw all possible lines of symmetry:

(a)



(b)



(c)



3. Classify the following letters of alphabet:

A B C D E F G H P Q U V W Z

(a) Those having horizontal axis of symmetry.

(b) Those having vertical axis of symmetry.

(c) Those having both axes of symmetry.

(d) Those having no line of symmetry.

4. Complete each of the following figures so that the dotted line is an axis of symmetry:

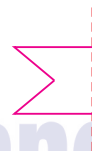
(a)



(b)



(c)



(d)



5. Draw a figure with

(a) no line of symmetry.

(b) only one axis of symmetry.

(c) three axes of symmetry.

(d) infinite number of axes of symmetry.

6. Write any four English letters which have no lines of symmetry.

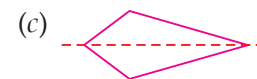
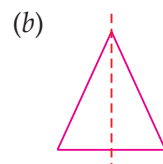
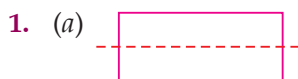
7. How many lines of symmetry will...

(a) a 5-sided regular polygon have?

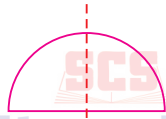
(a) a 10-sided regular polygon have?

(a) a  $p$ -sided regular polygon have?

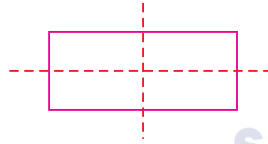
## ANSWERS



2. (a)



(b)



(c) No line of symmetry

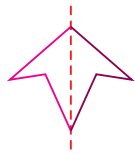
3. (a) B, C, D, E, H

(b) A, H, U, V, W

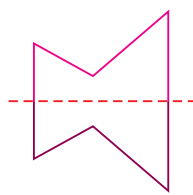
(c) H

(d) F, G, P, Q, Z

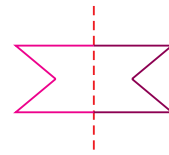
4. (a)



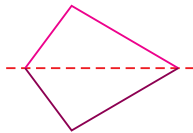
(b)



(c)



(d)



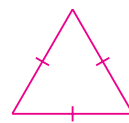
5. (a)



(b)



(c)



(d)



6. F, G, P, Q

7. (a) Five

(b) Ten

(c)  $p$ .