Worksheet

1. State whether true or false.
   a. The minimum number of lines of symmetry a figure can have is one.
   b. The number of lines of symmetry for a square is four.
   c. The number of lines of symmetry for the letter W is one.

2. ABCD is a parallelogram whose diagonals bisect each other at right angle and also the angles are 90º each. What are its lines of symmetry? Justify your answer.

3. One of the angles of a parallelogram PQRS is a right angle and its adjacent sides are equal in length. How many lines of symmetry does this figure have?

4. A triangle is such that all of its angles are 60º. How many lines of symmetry does it have? Justify your answer.

5. For ∠AOB measuring 38º, a ray OP is such that ∠AOP = 12º and another ray OQ is such that ∠BOQ =19°. Which of the two rays is a line of symmetry for the angle and why?

6. What is the total number of lines of symmetry of the letters of the word BOX?

7. Find two plane figures for which the number of lines of symmetry is the same as the number of sides that the figure has.

8. A line AB is the line of symmetry of a circle which intersects the circle at A and B. If the radius of the circle is 7 cm, what is the length of AB?

9. Do all lines of symmetry of a circle have the same length?

10. The line of symmetry of an angle makes an angle of 45º with one of its arms. What is the measure of the given angle?

11. A quadrilateral has four lines of symmetry. The figure is folded along its lines of symmetry. Then the paper is opened up and cut along the folds. If the original figure had a length of 30 cm, what are the dimensions of the new figures so obtained?

12. The sides of a triangle are of lengths 4 cm, 5 cm and 6 cm, respectively. How many lines of symmetry does this triangle have? Why?

Answers to Worksheet

1. a. False   b. True   c. True
2. diagonals AC and BD   3. four   4. three
5. ray OQ   6. 5   7. square and regular hexagon
8. 14 cm   9. yes   10. 90°
11. length of edge = 15 cm   12. 0, because it is a scalene triangle.