EduSahara™ Worksheet

Name : Chapter Based Worksheet

Chapter : Symmetry

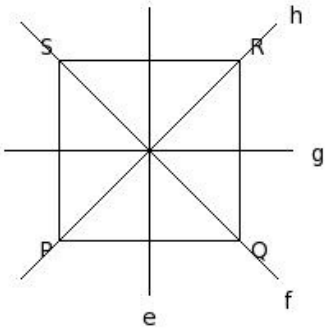
Grade : SSC Grade VII

1. Which of the following triangles have rotational symmetry?

   a) isosceles right angled triangle
   b) isosceles triangle
   c) scalene triangle
   d) equilateral triangle
   e) right angle triangle

   (i) {c,e,d} (ii) {d} (iii) {b,d} (iv) {a,d}

2. Which of the following are line(s) of symmetry for the given square?



   (i) f (ii) g (iii) { e, g } (iv) h (v) { e, f, g, h }

3. Which of the following quadrilaterals have four lines of symmetry?

   a) rectangle
   b) trapezium
   c) isosceles trapezium
   d) kite
   e) rhombus
   f) parallelogram
   g) square

   (i) {g} (ii) {a,g} (iii) {e,g} (iv) {b,g} (v) {c,d,g}

4. Which of the following English alphabet letters have two lines of symmetry?

   (i) Y (ii) I (iii) Q (iv) K (v) G

5. The English alphabet letter 'I' has how many lines of symmetry?

   (i) three (ii) infinite (iii) one (iv) zero (v) two

6. The English alphabet letter 'Z' has how many lines of symmetry?

   (i) two (ii) three (iii) infinite (iv) zero (v) one

7. Which of the following quadrilaterals have two lines of symmetry?

a) trapezium
b) square
c) isosceles trapezium
d) parallelogram
e) rhombus
f) rectangle
g) kite

(i) {g,f,e} (ii) {a,e} (iii) {e,f} (iv) {b,f} (v) {c,d,e}

8. Which of the following figures have two lines of symmetry?

a) square
b) angle with equal arms
c) isosceles triangle
d) kite
e) scalene triangle
f) rectangle
g) isosceles trapezium
h) line segment

(i) {f,h} (ii) {a,f} (iii) {b,h} (iv) {e,h,f} (v) {c,d,f}

9. The English alphabet letter 'D' has how many lines of symmetry?

(i) two (ii) zero (iii) three (iv) one (v) infinite

10. Which of the following figures have one line of symmetry?

a) isosceles right angled triangle
b) right angled triangle
c) equilateral triangle
d) line segment
e) angle with equal arms
f) isosceles triangle
g) scalene triangle
h) angle with unequal arms

(i) {h,a,e} (ii) {d,g,f} (iii) {b,a} (iv) {c,e} (v) {a,e,f}

11. A median is an axis of symmetry in which of the given figures?

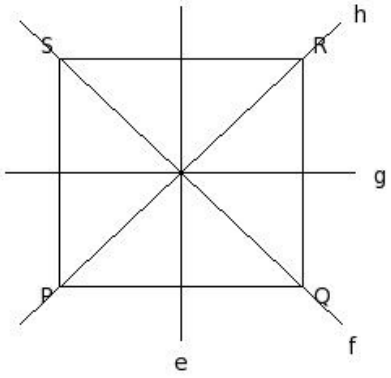
a) isosceles right angled triangle
b) isosceles triangle
c) scalene triangle
d) equilateral triangle
e) right angle triangle

(i) {e,b} (ii) {c,a} (iii) {c,e,d} (iv) {a,b,d} (v) {c,a,b}

12. The English alphabet letter 'O' has how many lines of symmetry?

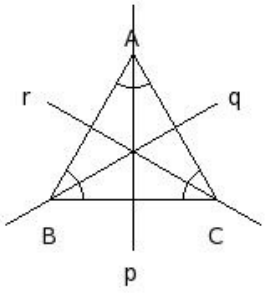
(i) zero (ii) three (iii) infinite (iv) two (v) one

13. Which of the following are line(s) of symmetry for the given rectangle?



(i) { e, f, g, h } (ii) f (iii) e (iv) g (v) { e, g }

14. Identify the line(s) of symmetry in the following figure



(i) { p, q, r } (ii) q (iii) none (iv) p (v) r

15. Which of the following are true?

a) A rectangle has rotational symmetry of order four.
b) A parallelogram has rotational symmetry of order four.
c) A square has rotational symmetry of order four.
d) A semi-circle has rotational symmetry of order two.
e) A rhombus has rotational symmetry of order four.

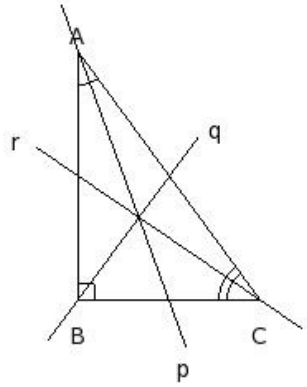
(i) {c} (ii) {a,c} (iii) {d,e,c} (iv) {b,c}

16. Which of the following figures have infinite lines of symmetry?

a) sector of a circle
b) circle
c) semicircle
d) line segment
e) n-sided polygon where n is very large

(i) {a,b} (ii) {c,b} (iii) {b} (iv) {d,e,b}

17. Identify the line(s) of symmetry in the following figure



(i) r (ii) p (iii) { p, q, r } (iv) none (v) q

18. Which of the following quadrilaterals have no rotational symmetry?

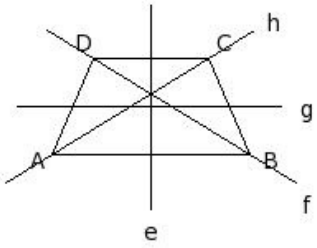
a) square
b) rhombus
c) parallelogram
d) isosceles trapezium
e) kite
f) trapezium
g) rectangle

(i) {c,g,f} (ii) {b,e} (iii) {a,d} (iv) {d,e,f} (v) {a,d,e}

19. Which of the following English alphabet letters does not have rotational symmetry?

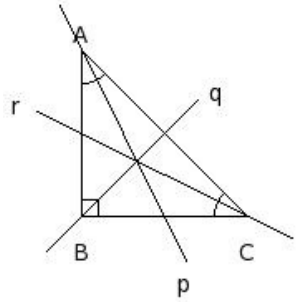
(i) N (ii) Z (iii) E (iv) O (v) S

20. Which of the following are line(s) of symmetry for the given isosceles trapezium?



(i) none (ii) { e, g } (iii) { f, h } (iv) h (v) e

21. Identify the line(s) of symmetry in the following figure



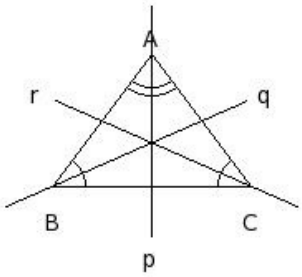
(i) r (ii) p (iii) q (iv) { p, q, r } (v) none

22. Which of the following are true?

a) Line of symmetry divides the polygon into two identical shapes.
b) An n-sided regular polygon has n/2 lines of symmetry if n is even.
c) If a triangle has two lines of symmetry, then it is a regular polygon.
d) If a quadrilateral has four lines of symmetry, then it is a regular polygon.
e) Lines of symmetry of a regular polygon are nothing but the diagonals of a regular polygon.
f) A regular polygon of n sides will have n lines of symmetry.
g) If a polygon is not regular, it will have less number of axes of symmetry than the number of sides.

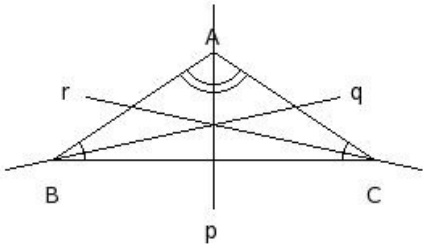
(i) {a,d,f,g} (ii) {c,g,a} (iii) {c,d} (iv) {b,a} (v) {e,b,f}

23. Identify the line(s) of symmetry in the following figure



(i) r (ii) none (iii) q (iv) p (v) { p, q, r }

24. Identify the line(s) of symmetry in the following figure



(i) q (ii) r (iii) { p, q, r } (iv) none (v) p

25. Which of the following are true?

a) A figure can have multiple axes of symmetry.
b) Axis of symmetry of a figure need not intersect with the figure at any point.
c) Line of symmetry is perpendicular to axis of symmetry.
d) For every point on the figure on one side of the axis of symmetry, there is a corresponding point on the other side.
e) An obtuse angled triangle has zero lines of symmetry.
f) A figure can be broken into two congruent shapes about its axis of symmetry.
g) Line of symmetry and axis of symmetry are same.
h) A line segment has one line of symmetry.

(i) {c,d} (ii) {b,g,a} (iii) {b,a} (iv) {a,d,f,g} (v) {e,h,f}

Assignment Key

1) (ii)	2) (v)	3) (i)	4) (ii)	5) (v)	6) (iv)
7) (iii)	8) (i)	9) (iv)	10) (v)	11) (iv)	12) (iii)
13) (v)	14) (i)	15) (i)	16) (iii)	17) (iv)	18) (iv)
19) (iii)	20) (v)	21) (iii)	22) (i)	23) (iv)	24) (v)
25) (iv)					