EduSahara™ Assignment

Name : Symmetry

Chapter : Symmetry

Grade : SSC Grade VII

1. The English alphabet letter 'C' has how many lines of symmetry?

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

2. The English alphabet letter 'H' has how many lines of symmetry?

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

3. The English alphabet letter 'G' has how many lines of symmetry?

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

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

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

5. Which of the following English alphabet letters have one line of symmetry?

   (i) P (ii) X (iii) G (iv) M (v) H

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

   (i) P (ii) D (iii) X (iv) M (v) G

7. Which of the following English alphabet letters have infinite lines of symmetry?

   (i) O (ii) I (iii) A (iv) H (v) B

8. Which of the following English alphabet letters have zero lines of symmetry?

   (i) B (ii) I (iii) Z (iv) W (v) H

9. Which of the following figures have no line of symmetry?

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

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

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

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

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

11. Which of the following are true?

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

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

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

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

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

13. Which of the following figures have three lines of symmetry?

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

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

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

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

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

15. Which of the following quadrilaterals have zero lines of symmetry?

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

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

16. Which of the following quadrilaterals have one line of symmetry?

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

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

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

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

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

18. Which of the following quadrilaterals have three lines of symmetry?

a) parallelogram
b) rectangle
c) isosceles trapezium
d) none
e) square
f) trapezium
g) rhombus

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

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

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

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

20. Which of the following are true?

a) Line of symmetry divides the polygon into two identical shapes.
b) If a quadrilateral has four lines of symmetry, then it is a regular polygon.
c) If a polygon is not regular, it will have less number of axes of symmetry than the number of sides.
d) An n-sided regular polygon has n/2 lines of symmetry if n is even.
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 triangle has two lines of symmetry, then it is a regular polygon.

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

21. A figure possesses rotational symmetry if it regain its shape after rotating

a) 90°
b) 180°
c) 270°
d) 360°

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

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

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

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

23. Which of the following triangles have rotational symmetry?

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

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

24. Which of the following are true?

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

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

25. If a figure has rotational symmetry of order 3, then it regain its shape after being rotated by an angle of

(i) 116° (ii) 97° (iii) 120° (iv) 128° (v) 148°

26. Which of the following figures neither have line symmetry nor point symmetry nor rotational symmetry?

a) isosceles triangle
b) equilateral triangle
c) line segment
d) angle with equal arms
e) scalene triangle

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

27. Which of the following English alphabet letters has rotational symmetry?

(i) Z (ii) B (iii) J (iv) F (v) D

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

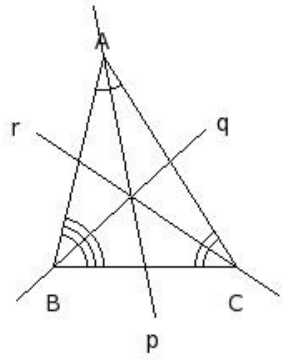
(i) O (ii) C (iii) Z (iv) S (v) N

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

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

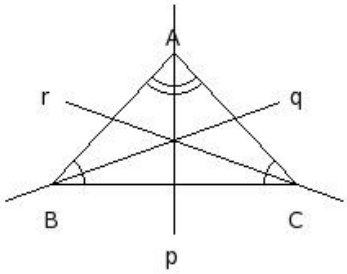
(i) {b,a} (ii) {d,e,a} (iii) {a} (iv) {c,a}

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



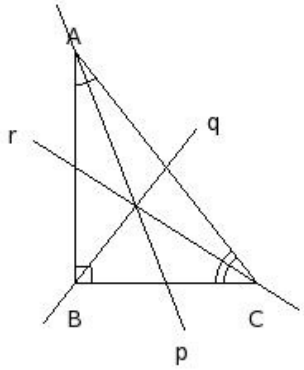
(i) none (ii) r (iii) p (iv) { p, q, r } (v) q

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



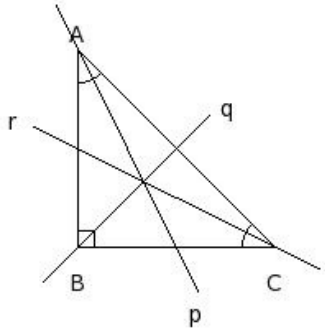
(i) p (ii) none (iii) r (iv) q (v) { p, q, r }

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



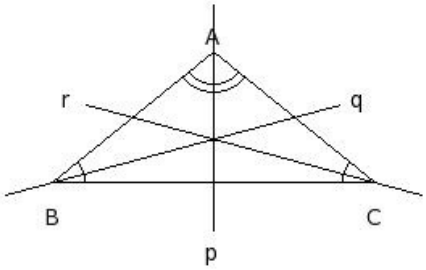
(i) none (ii) r (iii) q (iv) { p, q, r } (v) p

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



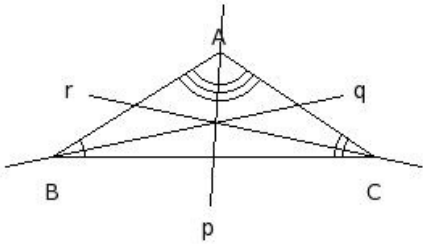
(i) none (ii) q (iii) p (iv) { p, q, r } (v) r

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



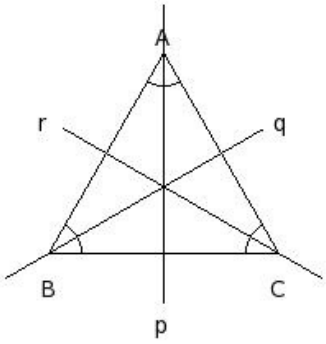
(i) none (ii) { p, q, r } (iii) q (iv) r (v) p

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



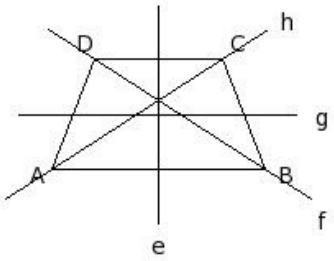
(i) q (ii) { p, q, r } (iii) p (iv) none (v) r

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



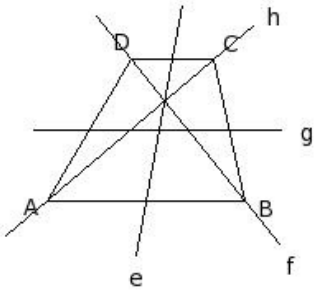
(i) { p, q, r } (ii) q (iii) r (iv) none (v) p

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



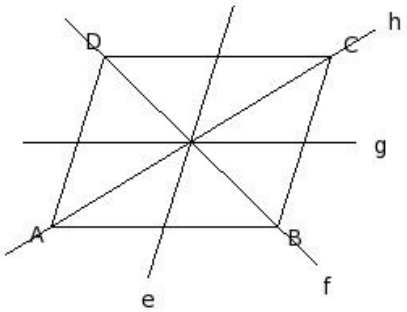
(i) h (ii) { e, f, g, h } (iii) g (iv) { e, g } (v) e

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



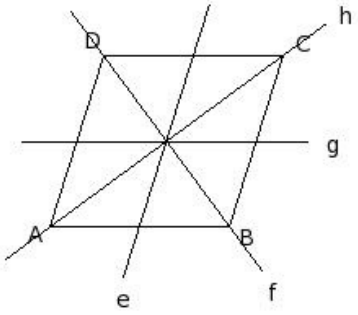
(i) e (ii) { e, f, g, h } (iii) none (iv) g (v) f

39. Which of the following are line(s) of symmetry for the given parallelogram?



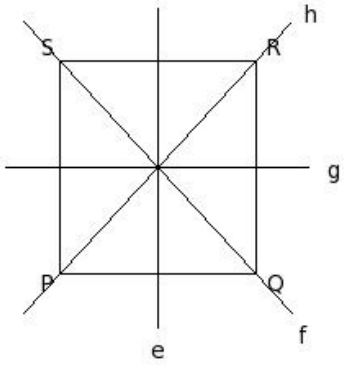
(i) { e, f, g, h } (ii) e (iii) none (iv) h (v) { f, h }

40. Which of the following are line(s) of symmetry for the given rhombus?



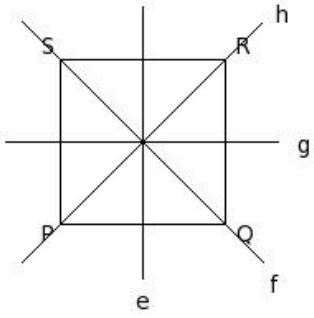
(i) { e, f, g, h } (ii) none (iii) e (iv) g (v) { f, h }

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



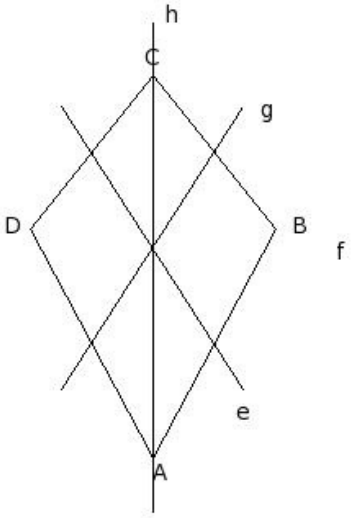
(i) { e, f, g, h } (ii) f (iii) { e, g } (iv) h (v) g

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



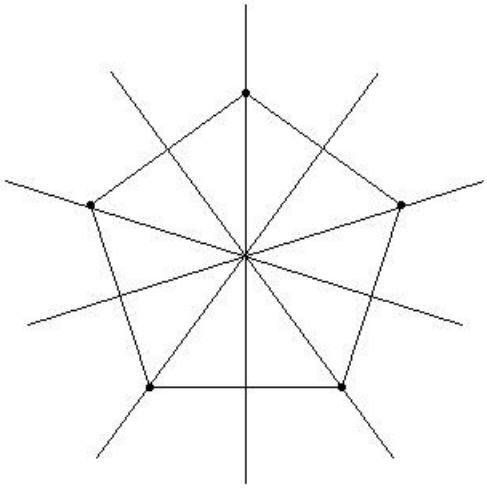
(i) none (ii) e (iii) g (iv) { e, g } (v) { e, f, g, h }

43. Which of the following are line(s) of symmetry for the given kite?



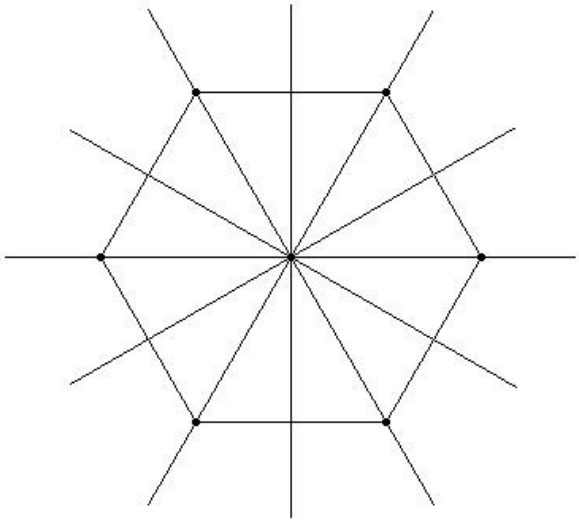
(i) f (ii) h (iii) none (iv) { f, h } (v) g

44. Given figure has how many lines of symmetry?



(i) 4 (ii) 8 (iii) 5 (iv) 6 (v) 2

45. Given figure has how many lines of symmetry?



(i) 3 (ii) 5 (iii) 7 (iv) 9 (v) 6

Assignment Key

1) (iii)	2) (iv)	3) (v)	4) (iii)	5) (iv)	6) (iii)
7) (i)	8) (iii)	9) (v)	10) (iii)	11) (iv)	12) (ii)
13) (ii)	14) (ii)	15) (ii)	16) (ii)	17) (v)	18) (v)
19) (ii)	20) (ii)	21) (ii)	22) (iii)	23) (ii)	24) (i)
25) (iii)	26) (i)	27) (i)	28) (ii)	29) (iii)	30) (i)
31) (i)	32) (i)	33) (ii)	34) (v)	35) (iv)	36) (i)
37) (v)	38) (iii)	39) (iii)	40) (v)	41) (iii)	42) (v)
43) (ii)	44) (iii)	45) (v)			