EduSahara™ Assignment

Name : Symmetry

Chapter : Symmetry

Grade : SSC Grade VII

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

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

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

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

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

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

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

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

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

   (i) X (ii) C (iii) R (iv) H (v) S

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

   (i) I (ii) P (iii) C (iv) N (v) Y

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

   (i) H (ii) X (iii) E (iv) O (v) M

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

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

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

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

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

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

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

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

11. Which of the following are true?

a) Line of symmetry and axis of symmetry are same.
b) A figure can have multiple axes of symmetry.
c) For every point on the figure on one side of the axis of symmetry, there is a corresponding point on the other side.
d) An obtuse angled triangle has zero lines of symmetry.
e) A line segment has one line of symmetry.
f) Axis of symmetry of a figure need not intersect with the figure at any point.
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) {e,b} (ii) {f,g,c} (iii) {d,a} (iv) {a,b,c,h} (v) {d,h,a}

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

20. Which of the following are true?

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

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

a) 180°
b) 270°
c) 90°
d) 360°

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

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

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

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

23. Which of the following triangles have rotational symmetry?

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

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

24. Which of the following are true?

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

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

25. If a figure has rotational symmetry of order 6, then it regain its shape after being rotated by an angle of

(i) 57° (ii) 65° (iii) 55° (iv) 60° (v) 63°

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

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

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

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

(i) F (ii) B (iii) S (iv) E (v) C

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

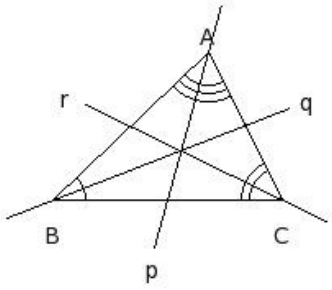
(i) N (ii) S (iii) H (iv) A (v) I

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

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

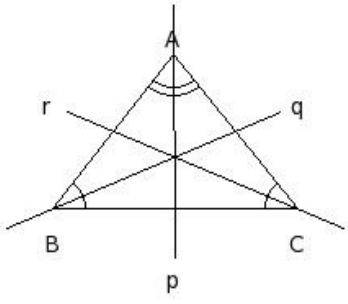
(i) {b,e} (ii) {e} (iii) {c,d,e} (iv) {a,e}

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



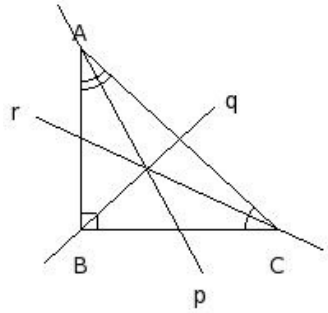
(i) none (ii) { p, q, r } (iii) p (iv) q (v) r

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



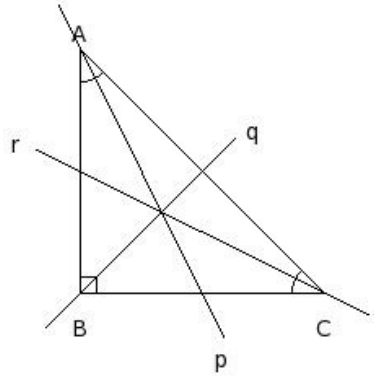
(i) q (ii) none (iii) { p, q, r } (iv) r (v) p

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



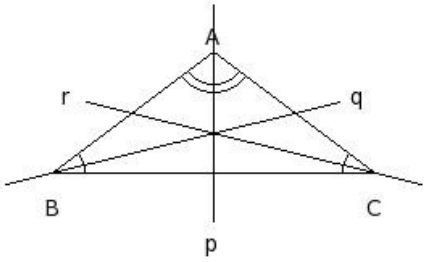
(i) { p, q, r } (ii) r (iii) none (iv) q (v) p

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



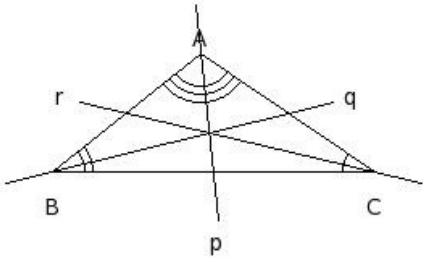
(i) q (ii) none (iii) { p, q, r } (iv) r (v) p

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



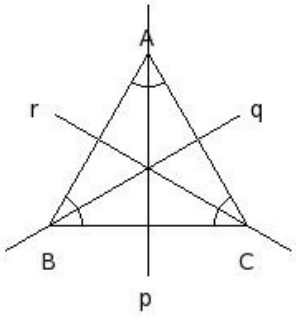
(i) q (ii) none (iii) p (iv) { p, q, r } (v) r

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



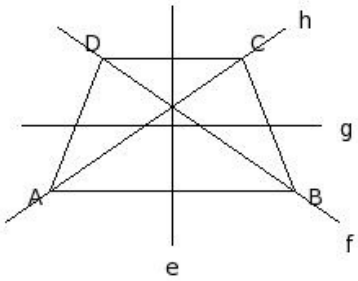
(i) r (ii) { p, q, r } (iii) q (iv) p (v) none

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



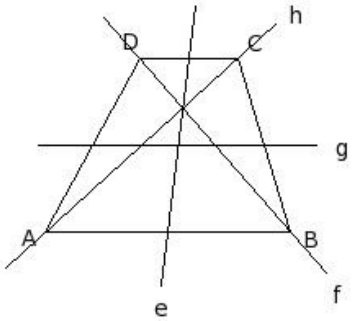
(i) { p, q, r } (ii) r (iii) q (iv) p (v) none

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



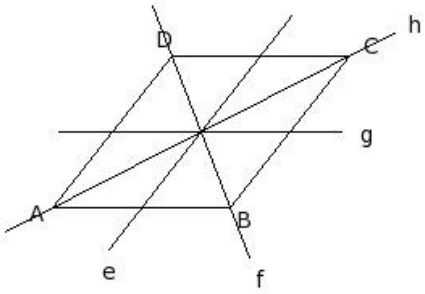
(i) h (ii) none (iii) e (iv) f (v) g

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



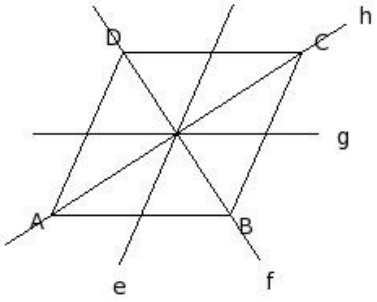
(i) none (ii) f (iii) e (iv) g (v) { e, f, g, h }

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



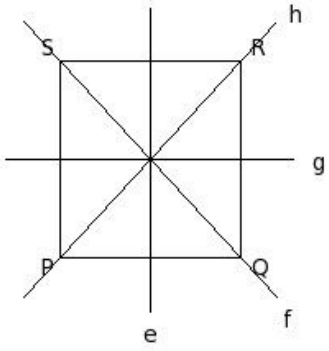
(i) { e, f, g, h } (ii) { f, h } (iii) h (iv) g (v) none

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



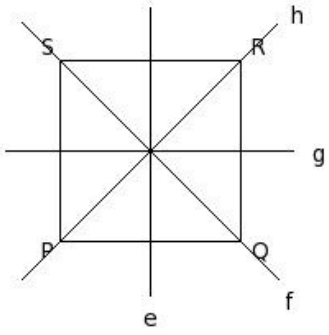
(i) { e, g } (ii) none (iii) e (iv) h (v) { f, h }

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



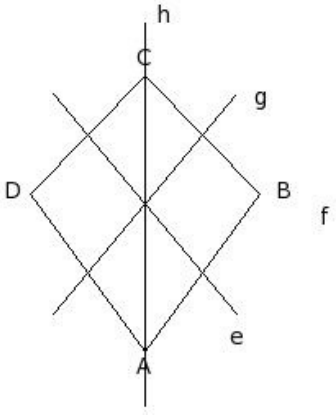
(i) { e, f, g, h } (ii) { e, g } (iii) f (iv) { f, h } (v) h

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



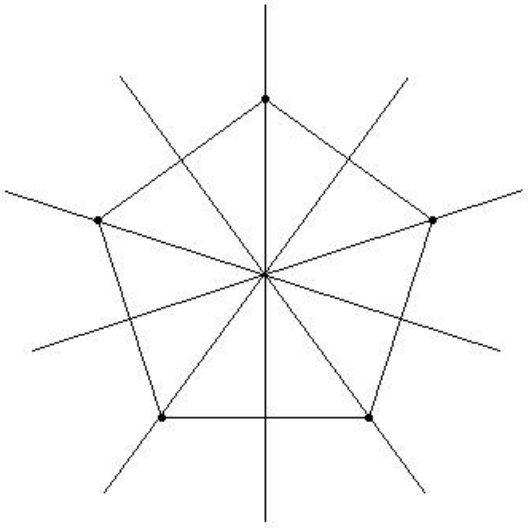
(i) none (ii) e (iii) f (iv) { e, f, g, h } (v) g

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



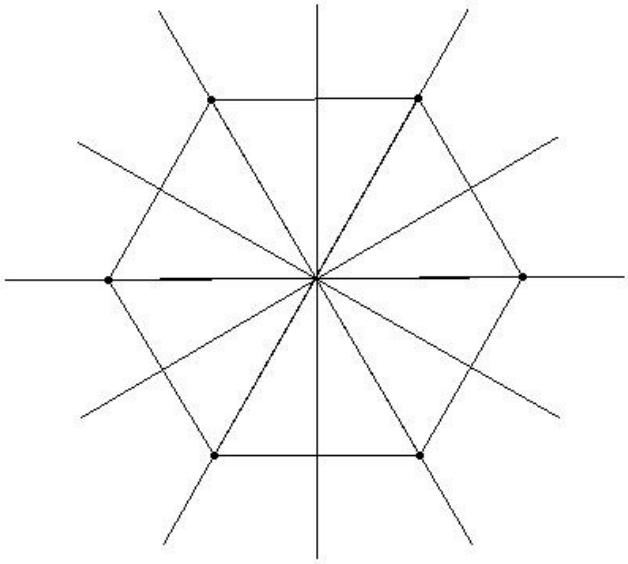
(i) g (ii) { f, h } (iii) f (iv) { e, f, g, h } (v) h

44. Given figure has how many lines of symmetry?



(i) 4 (ii) 5 (iii) 2 (iv) 6 (v) 7

45. Given figure has how many lines of symmetry?



(i) 7 (ii) 6 (iii) 5 (iv) 8 (v) 4

Assignment Key

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