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

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

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

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

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

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

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

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

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

   (i) L (ii) I (iii) H (iv) B (v) F

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

   (i) H (ii) S (iii) K (iv) Z (v) C

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

   (i) O (ii) E (iii) W (iv) I (v) X

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

   (i) H (ii) X (iii) D (iv) B (v) G

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

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

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

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

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

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

11. Which of the following are true?

    a) A figure can be broken into two congruent shapes about its axis of symmetry.

    b) For every point on the figure on one side of the axis of symmetry, there is a corresponding point on the other side.

    c) Axis of symmetry of a figure need not intersect with the figure at any point.

    d) Line of symmetry and axis of symmetry are same.

    e) Line of symmetry is perpendicular to axis of symmetry.

    f) An obtuse angled triangle has zero lines of symmetry.

    g) A line segment has one line of symmetry.

    h) A figure can have multiple axes of symmetry.

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

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

    a) isosceles triangle

    b) scalene triangle

    c) rectangle

    d) line segment

    e) angle with equal arms

    f) square

    g) isosceles trapezium

    h) kite

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

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

    a) line segment

    b) right angle triangle

    c) isosceles triangle

    d) equilateral triangle

    e) scalene triangle

    f) isosceles right angled triangle

    (i) {a,d} (ii) {b,d} (iii) {d} (iv) {f,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) isosceles triangle

    c) right angle triangle

    d) equilateral triangle

    e) scalene triangle

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

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

    a) square

    b) isosceles trapezium

    c) kite

    d) parallelogram

    e) rhombus

    f) rectangle

    g) trapezium

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

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

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

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

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

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

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

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

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

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

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

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

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

20. Which of the following are true?

   a) Lines of symmetry of a regular polygon are nothing but the diagonals of a regular polygon.
   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) A regular polygon of n sides will have n lines of symmetry.
   e) If a triangle has two lines of symmetry, then it is a regular polygon.
   f) Line of symmetry divides the polygon into two identical shapes.
   g) An n-sided regular polygon has n/2 lines of symmetry if n is even.

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

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

   a) 180°
   b) 360°
   c) 270°
   d) 90°

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

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

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

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

23. Which of the following triangles have rotational symmetry?

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

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

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 square has rotational symmetry of order four.
   d) A rectangle has rotational symmetry of order four.
   e) A parallelogram has rotational symmetry of order four.

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

25. If a figure has rotational symmetry of order 9, then it regain its shape after being rotated by an angle of

   (i) 43° (ii) 40° (iii) 37° (iv) 35° (v) 45°

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

   (i) R (ii) J (iii) A (iv) M (v) X

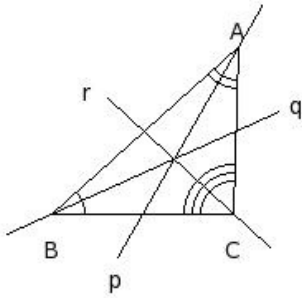27. Which of the following English alphabet letters does not have rotational symmetry?

   (i) H (ii) O (iii) C (iv) I (v) N

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

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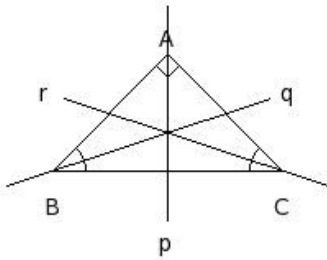   d) n-sided polygon where n is very large
   e) line segment

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

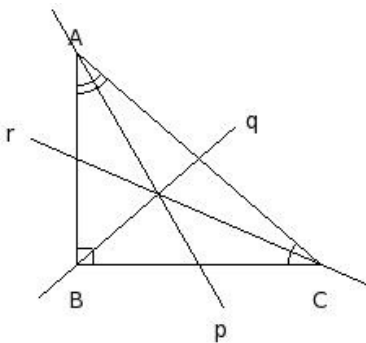29. Identify the line(s) of symmetry in the following figure

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

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

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

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

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

32. Identify the line(s) of symmetry in the following figure
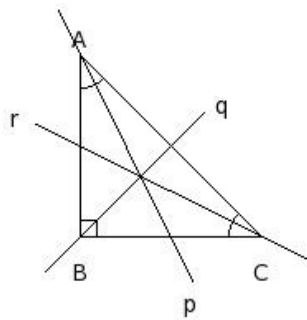
(i) none (ii) q (iii) { p, q, r } (iv) r (v) p

33. Identify the line(s) of symmetry in the following figure
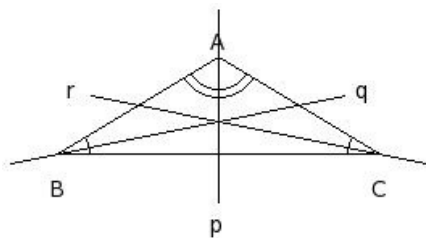
(i) { p, q, r } (ii) r (iii) p (iv) none (v) q

34. Identify the line(s) of symmetry in the following figure
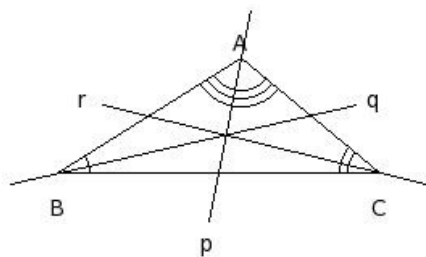
(i) { p, q, r } (ii) q (iii) r (iv) none (v) p

35. Identify the line(s) of symmetry in the following figure
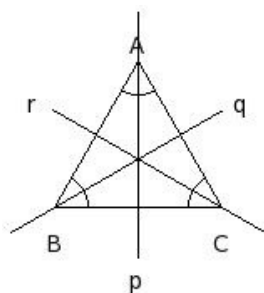
(i) p (ii) none (iii) { p, q, r } (iv) r (v) q

36. Which of the following are line(s) of symmetry for the given isosceles trapezium?
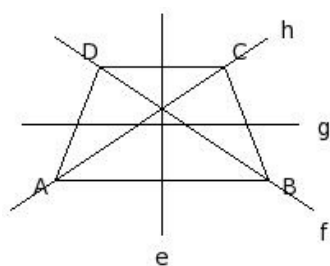
(i) e (ii) { e, f, g, h } (iii) g (iv) h (v) { e, g }

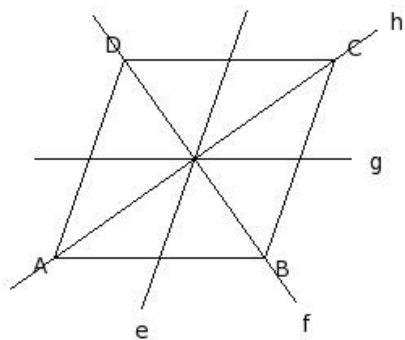37. Which of the following are line(s) of symmetry for the given trapezium?
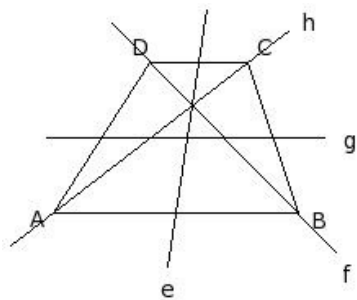
(i) { e, g } (ii) h (iii) { e, f, g, h } (iv) e (v) none

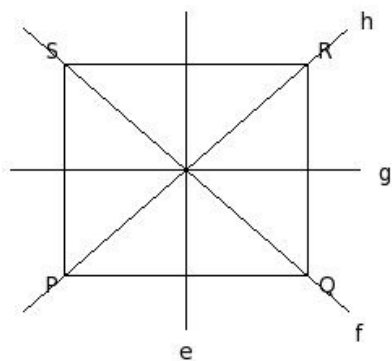38. Which of the following are line(s) of symmetry for the given parallelogram?
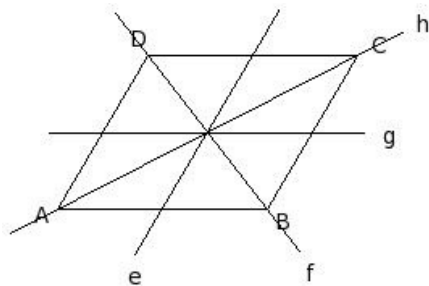
(i) none (ii) { f, h } (iii) h (iv) { e, f, g, h } (v) { e, g }

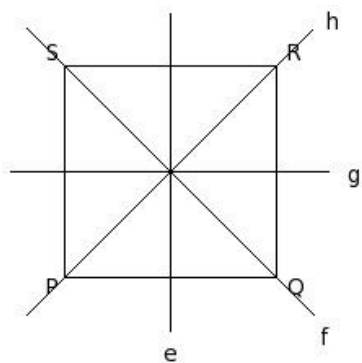39. Which of the following are line(s) of symmetry for the given rhombus?

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

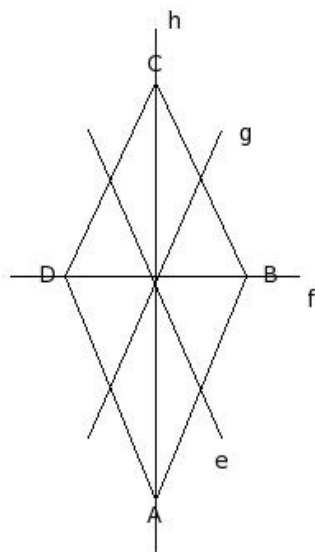40. Which of the following are line(s) of symmetry for the given rectangle?

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

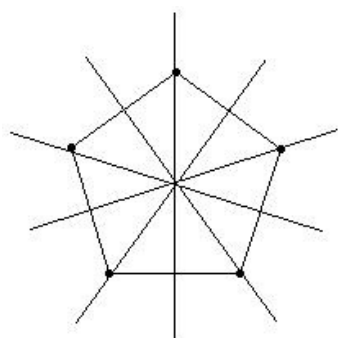41. Which of the following are line(s) of symmetry for the given square?

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

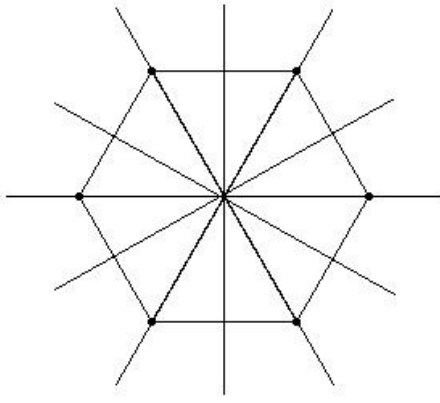42. Which of the following are line(s) of symmetry for the given kite?

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

43. Given figure has how many lines of symmetry?

(i) 5 (ii) 3 (iii) 8 (iv) 4 (v) 6

44. Given figure has how many lines of symmetry?

(i) 4 (ii) 6 (iii) 5 (iv) 9 (v) 7

Assignment Key

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