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

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

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

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

3. The English alphabet letter 'N' 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) zero (ii) two (iii) one (iv) infinite (v) three

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

   (i) H (ii) Q (iii) U (iv) S (v) X

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

   (i) L (ii) P (iii) I (iv) D (v) B

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

   (i) F (ii) K (iii) D (iv) H (v) X

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

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

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

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

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

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

10. 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) An obtuse angled triangle has zero lines of symmetry.
   d) Line of symmetry is perpendicular to axis of symmetry.
   e) A figure can be broken into two congruent shapes about its axis 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) Axis of symmetry of a figure need not intersect with the figure at any point.
   h) A figure can have multiple axes of symmetry.

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

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

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

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

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

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

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

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

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

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

14. Which of the following are true?

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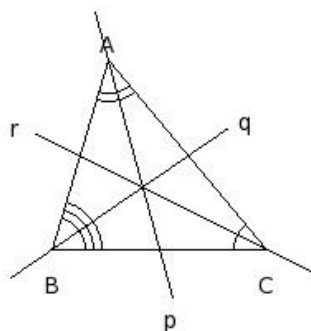   g) Line of symmetry divides the polygon into two identical shapes.

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

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

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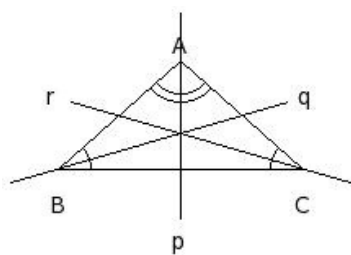   d) line segment
    e) circle

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

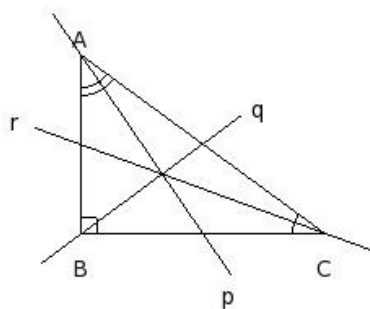16. Identify the line(s) of symmetry in the following figure

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

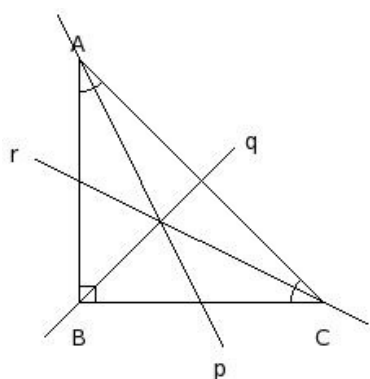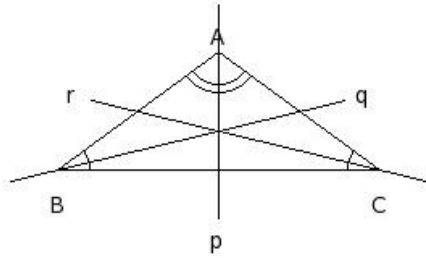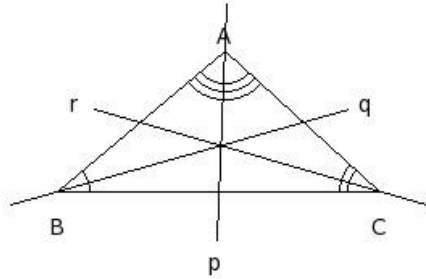17. Identify the line(s) of symmetry in the following figure

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

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

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

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

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

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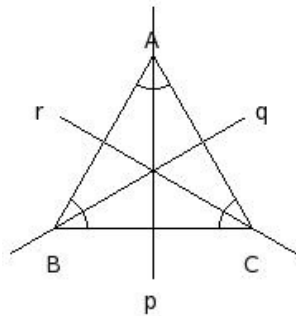

(i) r (ii) { p, q, r } (iii) none (iv) p (v) q

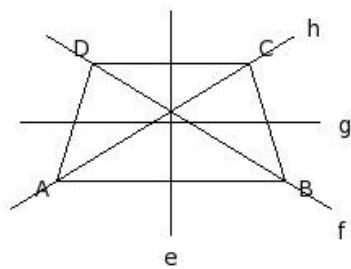21. Identify the line(s) of symmetry in the following figure

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

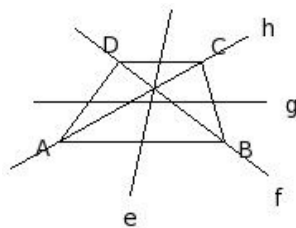22. Identify the line(s) of symmetry in the following figure

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

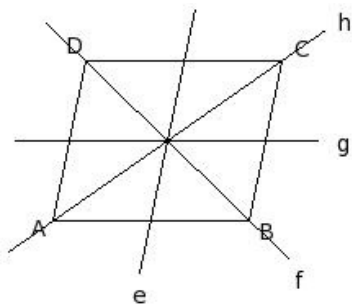23. Which of the following are line(s) of symmetry for the given isosceles trapezium?

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

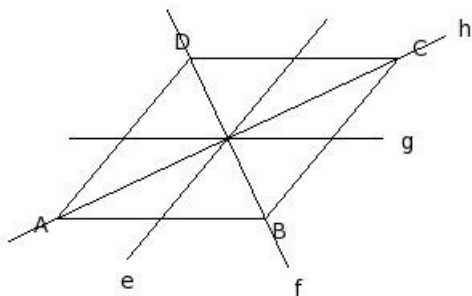24. Which of the following are line(s) of symmetry for the given trapezium?

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

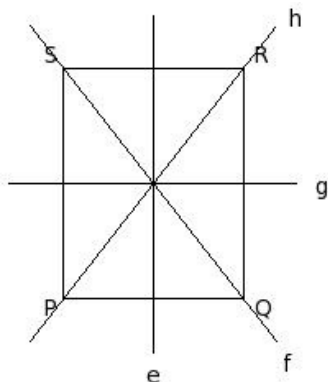25. Which of the following are line(s) of symmetry for the given parallelogram?

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

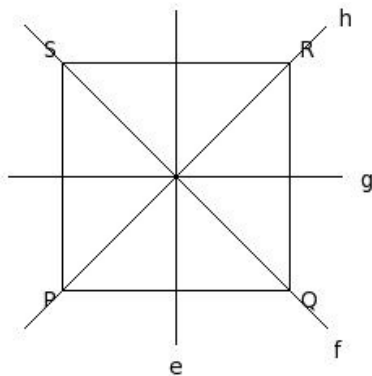26. Which of the following are line(s) of symmetry for the given rhombus?

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

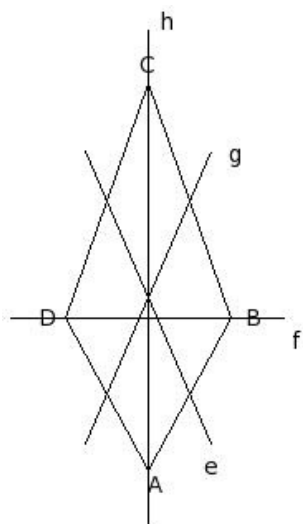27. Which of the following are line(s) of symmetry for the given rectangle?

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

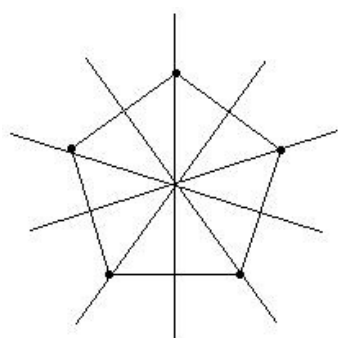28. Which of the following are line(s) of symmetry for the given square?

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

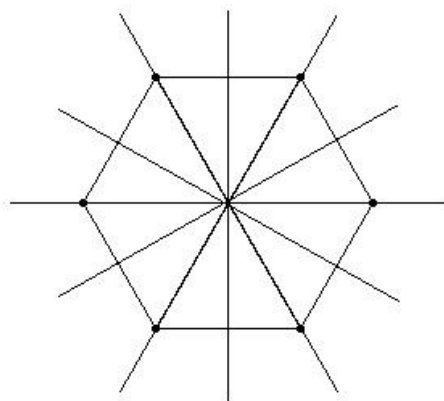29. Which of the following are line(s) of symmetry for the given kite?

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

30. Given figure has how many lines of symmetry?

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

31. Given figure has how many lines of symmetry?

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

Assignment Key

1) (i)	2) (v)	3) (v)	4) (iv)	5) (iii)	6) (iii)
7) (i)	8) (i)	9) (iii)	10) (iv)	11) (ii)	12) (ii)
13) (i)	14) (iii)	15) (iv)	16) (i)	17) (iii)	18) (v)
19) (iv)	20) (iv)	21) (iv)	22) (i)	23) (iv)	24) (v)
25) (iv)	26) (iii)	27) (iii)	28) (v)	29) (iv)	30) (i)
31) (iv)					