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

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

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

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

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

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

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

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

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

   (i) X (ii) C (iii) L (iv) I (v) F

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

   (i) X (ii) S (iii) L (iv) W (v) B

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

   (i) B (ii) X (iii) H (iv) L (v) C

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

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

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

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

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

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

10. Which of the following are true?

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

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

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

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

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

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

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

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

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

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

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

14. Which of the following are true?

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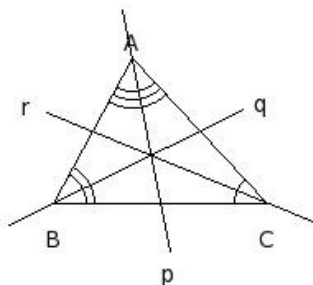
(i) {f,b,d} (ii) {a,c,d,g} (iii) {b,a} (iv) {e,g,a} (v) {e,c}

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

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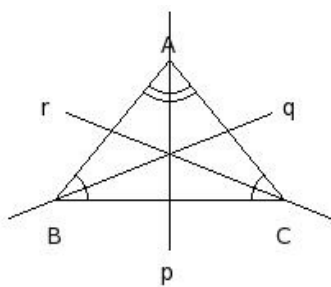   d) semicircle
   e) line segment

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

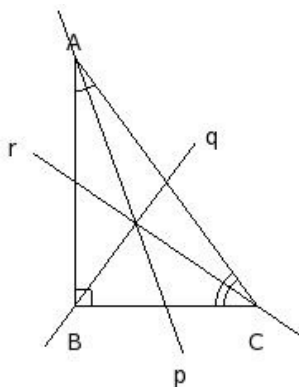16. Identify the line(s) of symmetry in the following figure

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

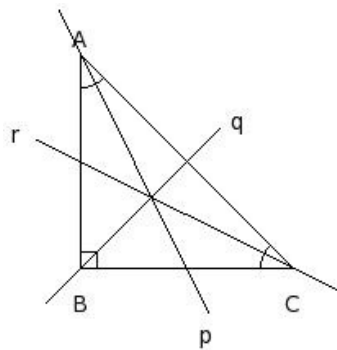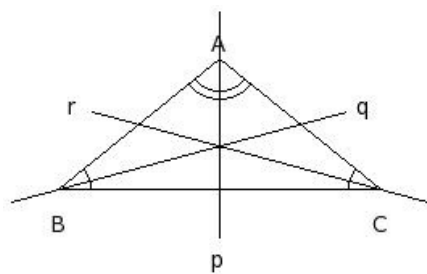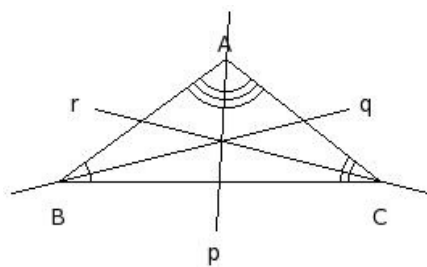17. Identify the line(s) of symmetry in the following figure

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

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

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

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

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

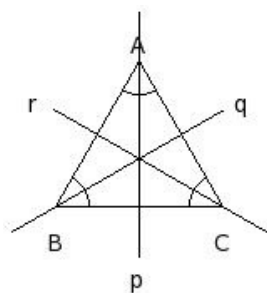20. Identify the line(s) of symmetry in the following figure

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

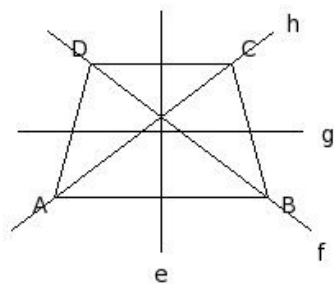21. Identify the line(s) of symmetry in the following figure

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

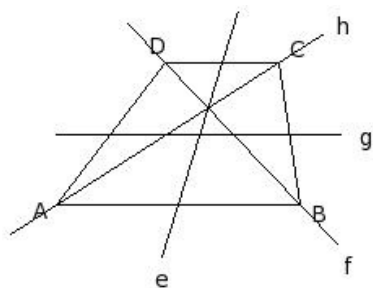22. Identify the line(s) of symmetry in the following figure

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

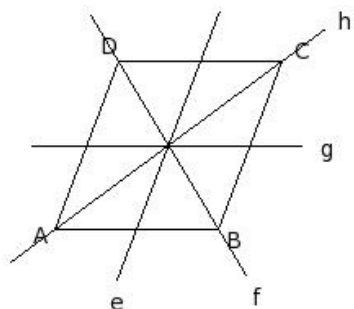23. Which of the following are line(s) of symmetry for the given isosceles trapezium?

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

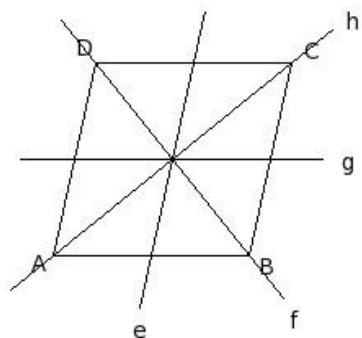24. Which of the following are line(s) of symmetry for the given trapezium?

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

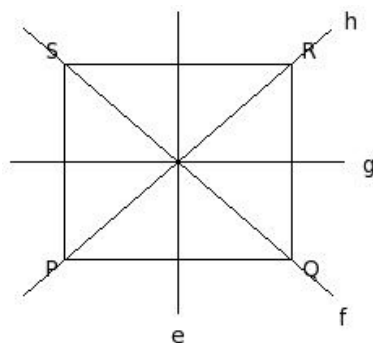25. Which of the following are line(s) of symmetry for the given parallelogram?

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

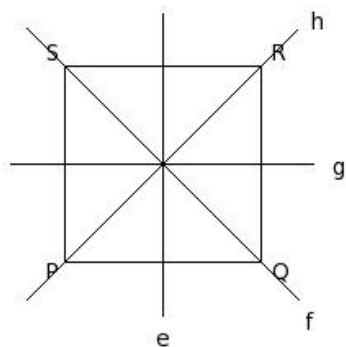26. Which of the following are line(s) of symmetry for the given rhombus?

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

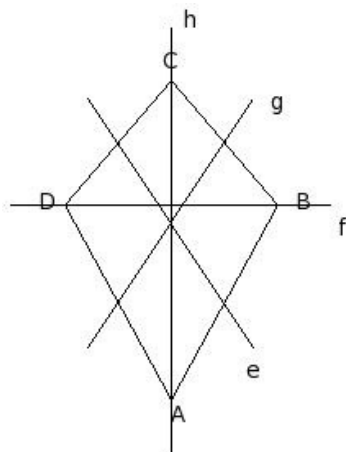27. Which of the following are line(s) of symmetry for the given rectangle?

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

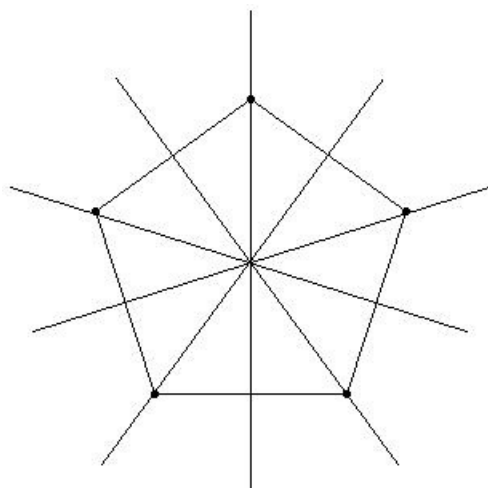28. Which of the following are line(s) of symmetry for the given square?

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

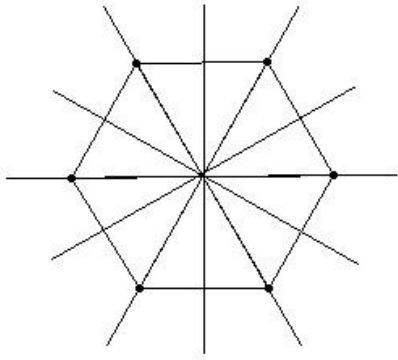29. Which of the following are line(s) of symmetry for the given kite?

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

30. Given figure has how many lines of symmetry?

(i) 3 (ii) 6 (iii) 4 (iv) 5 (v) 7

31. Given figure has how many lines of symmetry?

(i) 5 (ii) 7 (iii) 6 (iv) 3 (v) 8

Assignment Key

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