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

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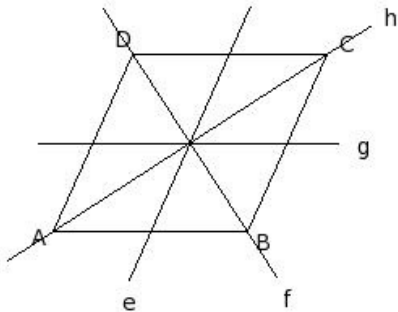   f) square
   g) isosceles trapezium

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

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

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

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

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

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

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

   (i) H (ii) X (iii) K (iv) W (v) O

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

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

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

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

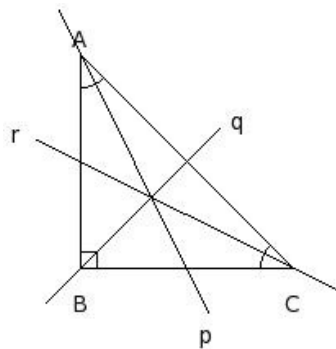   (i) infinite (ii) two (iii) one (iv) three (v) zero

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

   (i) Z (ii) X (iii) A (iv) G (v) H

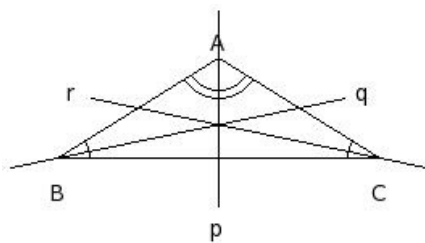8. Which of the following English alphabet letters does not have rotational symmetry?

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

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

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

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

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

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

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

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

12. Which of the following are true?

   a) A regular polygon of n sides will have n lines of symmetry.
   b) If a quadrilateral has four lines of symmetry, then it is a regular polygon.
   c) Lines of symmetry of a regular polygon are nothing but the diagonals of a regular polygon.
   d) Line of symmetry divides the polygon into two identical shapes.
   e) If a triangle has two lines of symmetry, then it is 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) {c,a} (ii) {a,b,d,g} (iii) {e,g,a} (iv) {f,c,d} (v) {e,b}

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

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

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

14. The English alphabet letter 'X' has how many lines of symmetry?

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

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

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

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

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

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

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

   (i) D (ii) J (iii) G (iv) I (v) A

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

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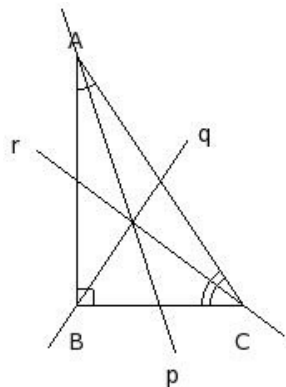   f) parallelogram
   g) isosceles trapezium

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

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

   a) angle with equal arms

   b) rectangle

   c) isosceles triangle

   d) isosceles trapezium

   e) line segment

   f) square

   g) scalene triangle

   h) kite

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

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

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

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

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

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

   a) trapezium

   b) square

   c) kite

   d) rhombus

   e) parallelogram

   f) rectangle

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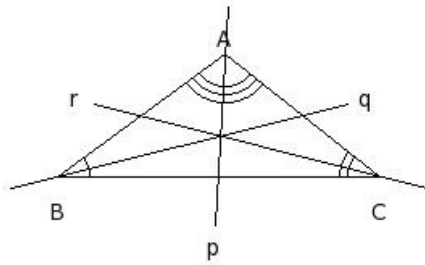
   (i) {c,e,d} (ii) {d,f} (iii) {g,f,d} (iv) {a,d} (v) {b,f}

23. Which of the following are true?

   a) A square has rotational symmetry of order four.

   b) A rectangle has rotational symmetry of order four.

   c) A parallelogram has rotational symmetry of order four.

   d) A semi-circle has rotational symmetry of order two.

   e) A rhombus has rotational symmetry of order four.

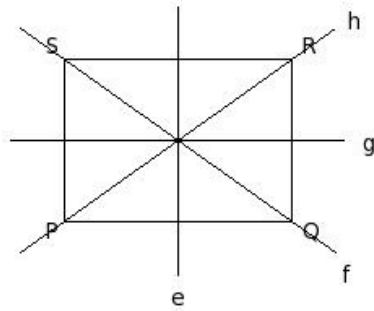   (i) {d,e,a} (ii) {c,a} (iii) {b,a} (iv) {a}

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

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

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

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

Assignment Key

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