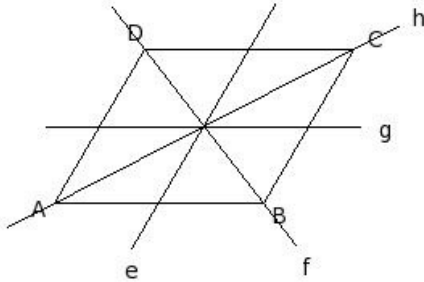1. Which of the following English alphabet letters have infinite lines of symmetry?

   (i) O (ii) C (iii) I (iv) D (v) X

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

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

3. Which of the following are true?

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

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

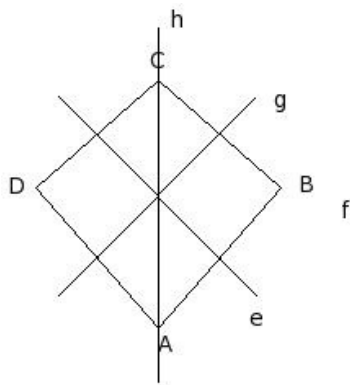4. Which of the following figures have one line of symmetry?

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

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

5. Which of the following English alphabet letters have zero lines of symmetry?
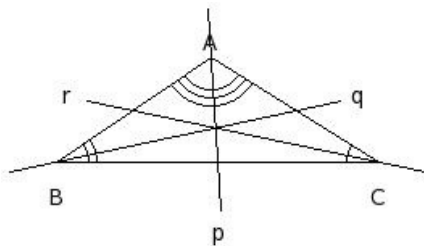
   (i) X (ii) B (iii) K (iv) L (v) H

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

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

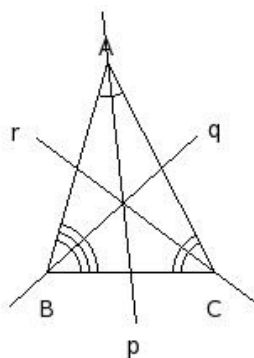7. Identify the line(s) of symmetry in the following figure

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

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

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

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

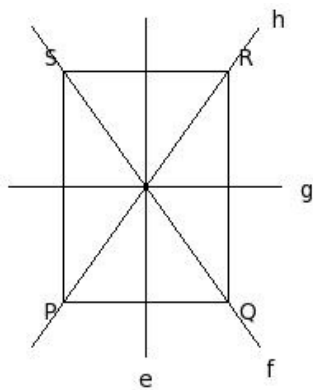9. Identify the line(s) of symmetry in the following figure

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

10. Which of the following English alphabet letters have one line of symmetry?
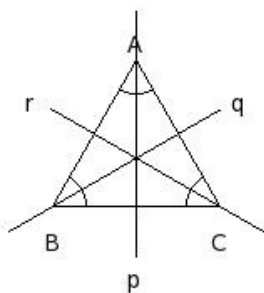(i) H (ii) I (iii) G (iv) D (v) L

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

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

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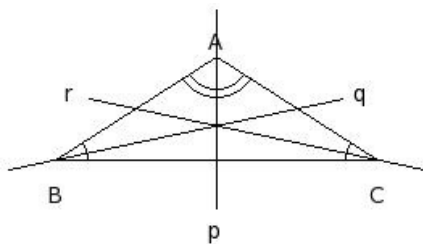

(i) p (ii) { p, q, r } (iii) r (iv) none (v) q

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

(i) G (ii) C (iii) I (iv) L (v) E

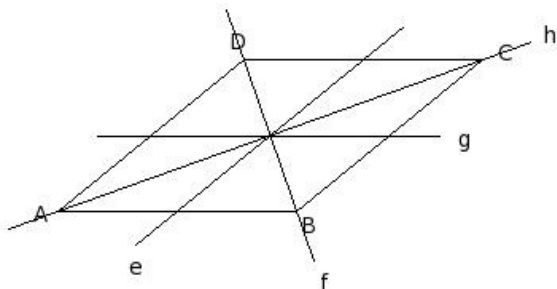14. The English alphabet letter 'B' has how many lines of symmetry?

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

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

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

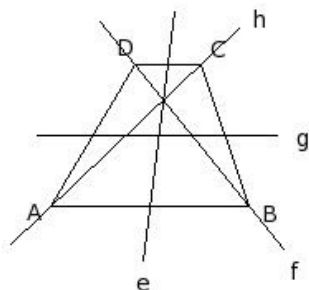16. Which of the following are line(s) of symmetry for the given rhombus?

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

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

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

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

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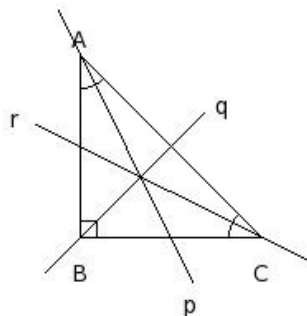

   (i) { e, g } (ii) f (iii) none (iv) g (v) e

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

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

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

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

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

21. The English alphabet letter 'R' has how many lines of symmetry?
   (i) zero (ii) three (iii) two (iv) infinite (v) one

22. Which of the following figures have no line of symmetry?
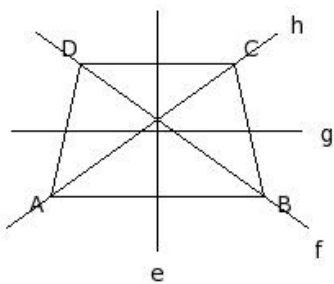
   a) angle with equal arms
   b) angle with unequal arms
   c) line segment
   d) scalene triangle
   e) isosceles triangle
   f) equilateral triangle

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

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

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

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

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

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

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

Assignment Key

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