



1. The English alphabet letter 'C' has how many lines of symmetry?  
(i) infinite (ii) two (iii) one (iv) three (v) zero
2. The English alphabet letter 'H' has how many lines of symmetry?  
(i) two (ii) three (iii) zero (iv) infinite (v) one
3. The English alphabet letter 'S' has how many lines of symmetry?  
(i) two (ii) three (iii) zero (iv) one (v) infinite
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) Z (ii) I (iii) A (iv) H (v) P
6. Which of the following English alphabet letters have two lines of symmetry?  
(i) D (ii) G (iii) J (iv) B (v) I
7. Which of the following English alphabet letters have zero lines of symmetry?  
(i) I (ii) X (iii) G (iv) D (v) B
8. Which of the following figures have no line of symmetry?  
a) scalene triangle  
b) angle with unequal arms  
c) line segment  
d) equilateral triangle  
e) isosceles triangle  
f) angle with equal arms  
  
(i) {c,b,a} (ii) {c,a} (iii) {d,b} (iv) {a,b} (v) {e,f,a}
9. Which of the following figures have one line of symmetry?  
a) isosceles triangle  
b) scalene triangle  
c) line segment  
d) equilateral triangle  
e) angle with unequal arms  
f) angle with equal arms  
g) isosceles right angled triangle  
h) right angled triangle  
  
(i) {b,a} (ii) {c,f} (iii) {a,f,g} (iv) {d,e,g} (v) {h,a,f}

10. Which of the following are true?

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

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

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

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

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

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

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

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

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

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

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

14. Which of the following are true?

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

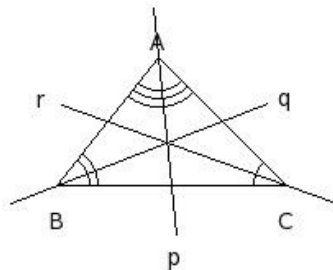
(i) {g,a,e} (ii) {c,d} (iii) {a,b} (iv) {b,d,e,f} (v) {c,f,b}

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

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

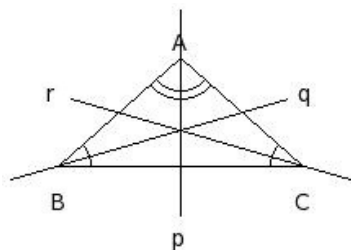
(i) {b,a} (ii) {a} (iii) {c,a} (iv) {d,e,a}

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



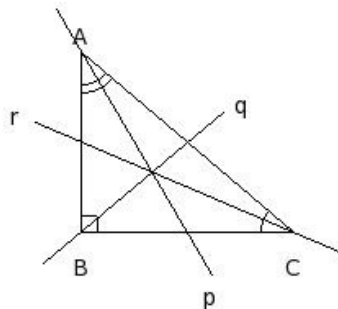
(i) q (ii) { p, q, r } (iii) none (iv) r (v) p

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



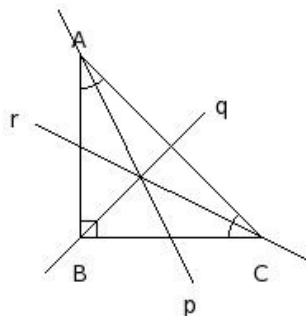
(i) { p, q, r } (ii) none (iii) q (iv) r (v) p

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



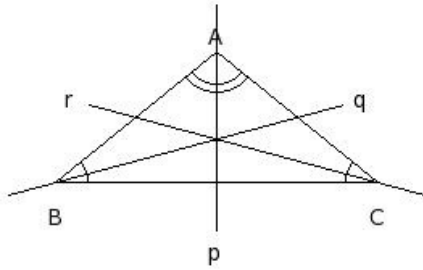
(i) q (ii) r (iii) p (iv) none (v) { p, q, r }

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



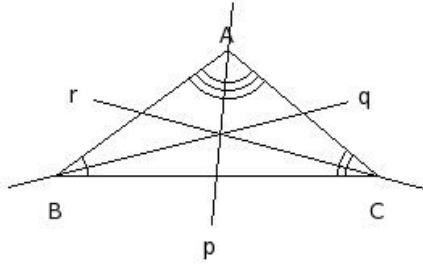
(i) q (ii) none (iii) { p, q, r } (iv) r (v) p

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



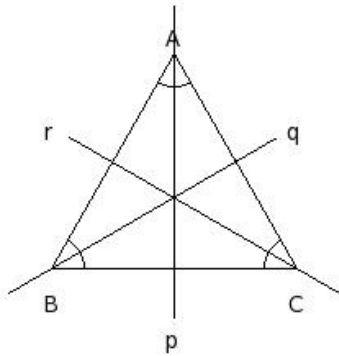
- (i) p (ii) q (iii) r (iv) none (v) { p, q, r }

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



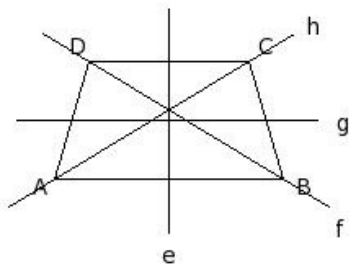
- (i) p (ii) { p, q, r } (iii) none (iv) r (v) q

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



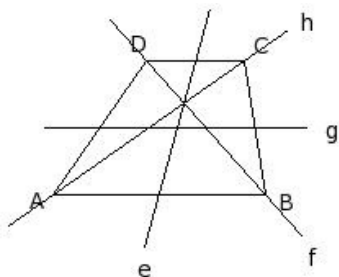
- (i) q (ii) r (iii) p (iv) none (v) { p, q, r }

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



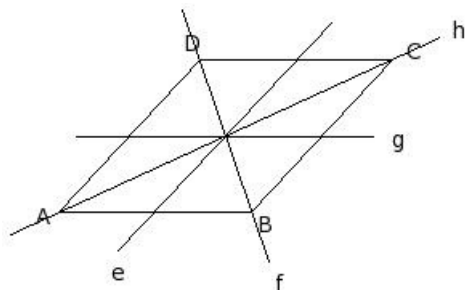
- (i) g (ii) h (iii) none (iv) e (v) { e, f, g, h }

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



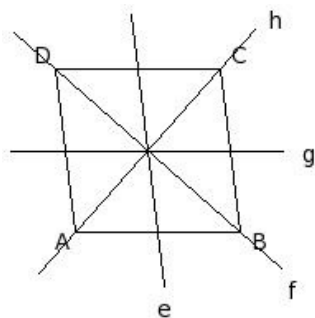
- (i) { e, f, g, h } (ii) { e, g } (iii) h (iv) none (v) g

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



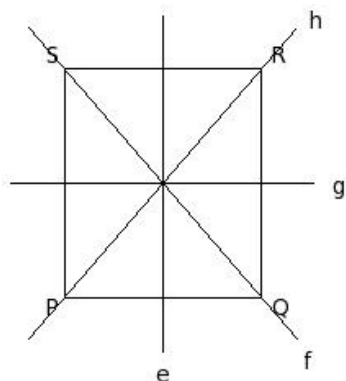
- (i) { e, g } (ii) { f, h } (iii) none (iv) h (v) { e, f, g, h }

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



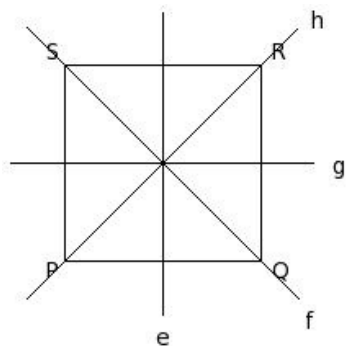
- (i) e (ii) { f, h } (iii) h (iv) none (v) { e, g }

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



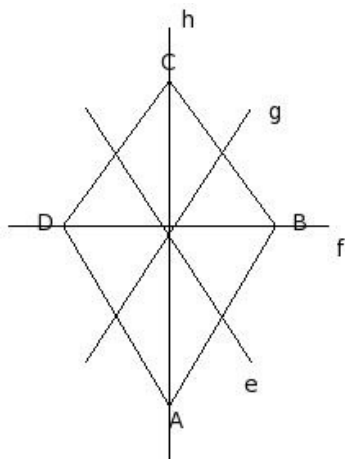
- (i) e (ii) { e, g } (iii) { e, f, g, h } (iv) f (v) g

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



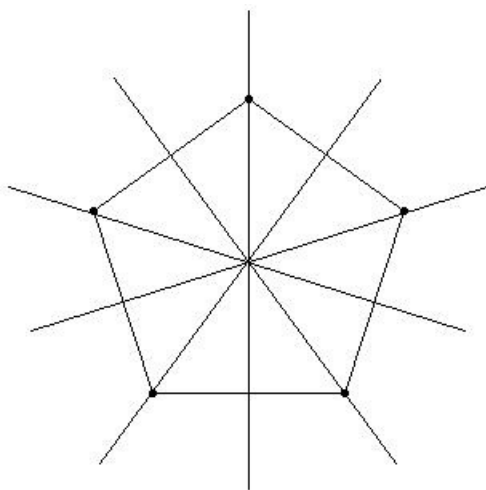
- (i) e (ii) f (iii) { e, f, g, h } (iv) g (v) { e, g }

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



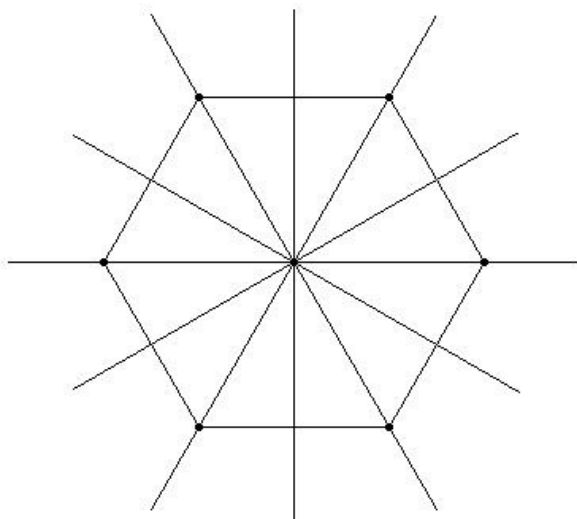
- (i) none (ii) { e, f, g, h } (iii) h (iv) { f, h } (v) g

30. Given figure has how many lines of symmetry?



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

31. Given figure has how many lines of symmetry?



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

## Assignment Key

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