EduSahara™ Assignment

Name : Linear Symmetry

Chapter : Linear Symmetry

Grade : ICSE Grade VI

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

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

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

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

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

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

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

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

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

   (i) I (ii) E (iii) L (iv) H (v) F

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

   (i) P (ii) B (iii) I (iv) M (v) N

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

   (i) I (ii) D (iii) O (iv) K (v) H

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

   (i) I (ii) G (iii) X (iv) U (v) B

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

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

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

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

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

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

11. Which of the following are true?

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

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

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

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

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

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

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

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

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

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

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

15. Which of the following quadrilaterals have zero lines of symmetry?

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

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

16. Which of the following quadrilaterals have one line of symmetry?

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

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

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

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

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

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

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

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

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

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

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

20. Which of the following are true?

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

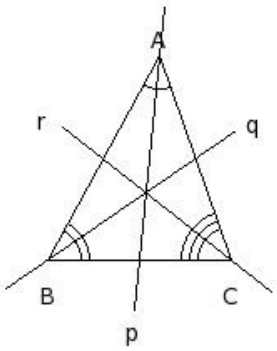
(i) {a,b} (ii) {g,a,e} (iii) {c,d} (iv) {c,f,b} (v) {b,d,e,f}

21. 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) line segment
e) circle

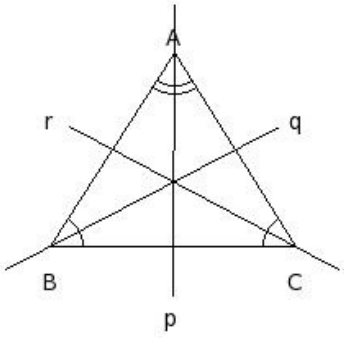
(i) {e} (ii) {b,e} (iii) {a,e} (iv) {c,d,e}

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



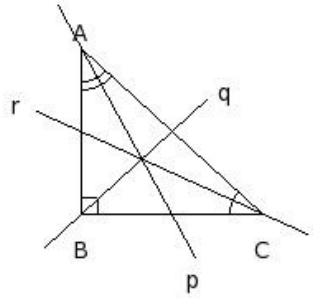
(i) none (ii) { p, q, r } (iii) r (iv) p (v) q

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



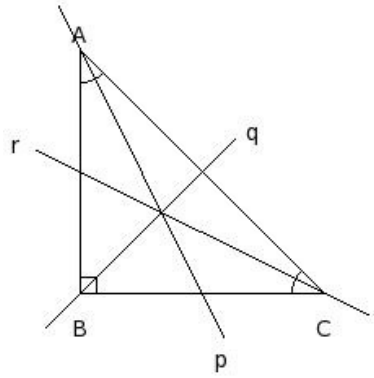
(i) q (ii) p (iii) none (iv) { p, q, r } (v) r

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



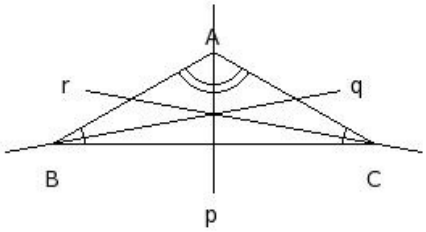
(i) none (ii) { p, q, r } (iii) q (iv) r (v) p

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



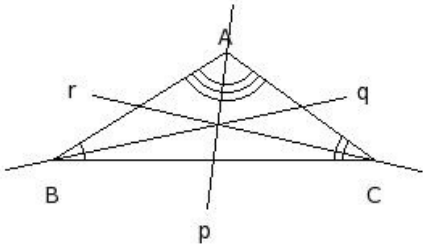
(i) { p, q, r } (ii) q (iii) none (iv) r (v) p

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



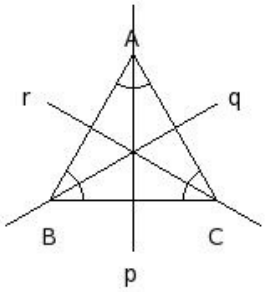
(i) none (ii) r (iii) { p, q, r } (iv) p (v) q

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



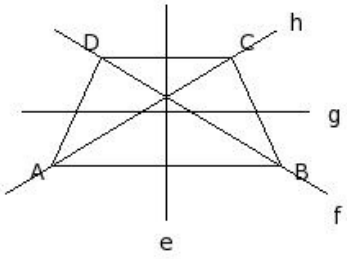
(i) none (ii) p (iii) q (iv) r (v) { p, q, r }

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



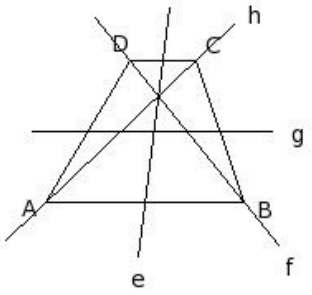
(i) { p, q, r } (ii) q (iii) none (iv) r (v) p

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



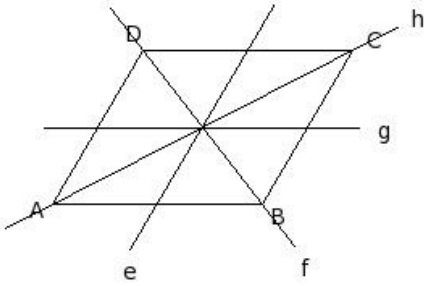
(i) f (ii) h (iii) e (iv) { f, h } (v) g

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



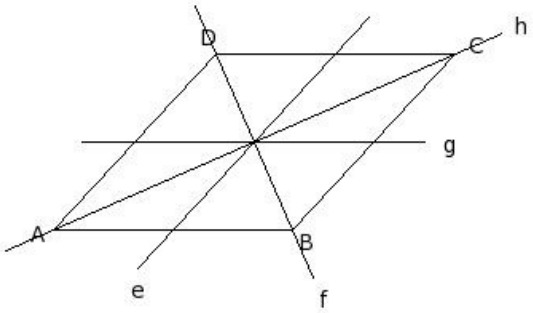
(i) e (ii) { e, g } (iii) h (iv) none (v) { e, f, g, h }

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



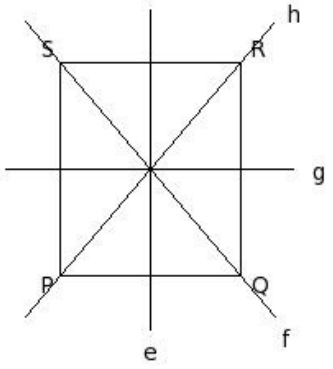
(i) g (ii) h (iii) none (iv) { e, g } (v) e

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



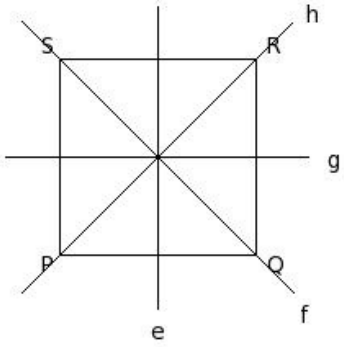
(i) f (ii) none (iii) g (iv) h (v) { f, h }

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



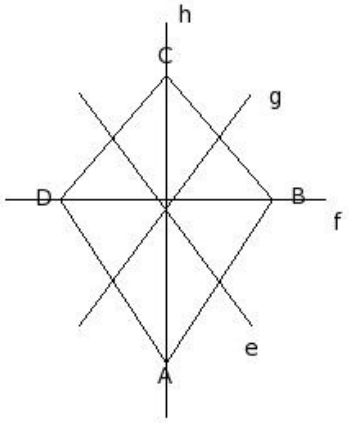
(i) f (ii) { e, g } (iii) { e, f, g, h } (iv) e (v) g

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



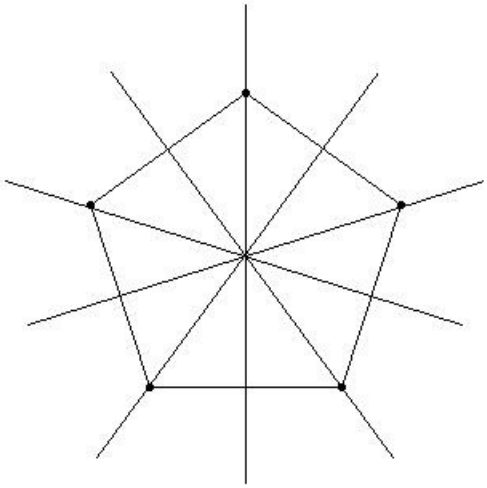
(i) h (ii) { e, f, g, h } (iii) f (iv) none (v) g

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



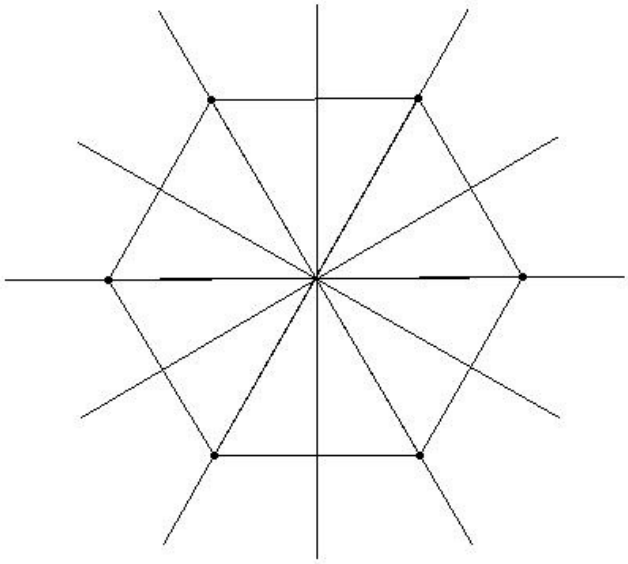
(i) { e, f, g, h } (ii) { e, g } (iii) e (iv) h (v) { f, h }

36. Given figure has how many lines of symmetry?



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

37. Given figure has how many lines of symmetry?



(i) 9 (ii) 6 (iii) 5 (iv) 4 (v) 7

Assignment Key

1) (v)	2) (i)	3) (iii)	4) (ii)	5) (ii)	6) (iii)
7) (iii)	8) (ii)	9) (ii)	10) (ii)	11) (ii)	12) (i)
13) (v)	14) (v)	15) (ii)	16) (v)	17) (ii)	18) (iii)
19) (v)	20) (v)	21) (i)	22) (i)	23) (ii)	24) (i)
25) (ii)	26) (iv)	27) (i)	28) (i)	29) (iii)	30) (iv)
31) (iii)	32) (v)	33) (ii)	34) (ii)	35) (iv)	36) (iv)
37) (ii)					