EduSahara™ Learning Center Assignment

Grade : Class VII, SSC
Chapter : Symmetry
Name : Symmetry
Licensed To : Teachers and Students for non-commercial use

---

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

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

---

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

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

---

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

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

---

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

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

---

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

   (i) K (ii) I (iii) H (iv) R (v) N

---

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

   (i) X (ii) S (iii) N (iv) A (v) B

---

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

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

---

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

   (i) I (ii) H (iii) L (iv) D (v) C

---

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

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

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

---

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

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

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

---

11. Which of the following are true ?

a) A figure can be broken into two congruent shapes about its axis of symmetry
b) A line segment has one line of symmetry
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 figure can have multiple axes of symmetry
f) Line of symmetry is perpendicular to axis of symmetry
g) An obtuse angled triangle has zero lines of symmetry
h) For every point on the figure on one side of the axis of symmetry, there is a corresponding point on the other side

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

---

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

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

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

---

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

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

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

---

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

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

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

---

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

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

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

---

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

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

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

---

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

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

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

---

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

a) none
b) square

c) rectangle
d) parallelogram
e) rhombus
f) isosceles trapezium
g) trapezium

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

---

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

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

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

---

20. Which of the following are true ?

a) If a quadrilateral has four lines of symmetry, then it is a regular polygon
b) If a triangle has two lines of symmetry, then it is a regular polygon
c) Line of symmetry divides the polygon into two identical shapes
d) An n-sided regular polygon has n/2 lines of symmetry if n is even
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) Lines of symmetry of a regular polygon are nothing but the diagonals of a regular polygon

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

---

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

a) 270°
b) 360°
c) 90°
d) 180°

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

---

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

a) isosceles trapezium
b) trapezium
c) rectangle
d) rhombus
e) square

f) kite
g) parallelogram

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

---

23. Which of the following triangles have rotational symmetry ?

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

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

---

24. Which of the following are true ?

a) A parallelogram has rotational symmetry of order four
b) A square has rotational symmetry of order four
c) A semi-circle has rotational symmetry of order two
d) A rectangle has rotational symmetry of order four
e) A rhombus has rotational symmetry of order four

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

---

25. If a figure has rotational symmetry if order 5, then it regain its shape after being rotated by an angle of

(i) 72° (ii) 69° (iii) 75° (iv) 67° (v) 77°

---

26. Which of the following figures neither have line symmetry nor point symmetry nor rotational symmetry ?

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

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

---

27. Which of the following English alphabet letters have rotational symmetry?

(i) E (ii) D (iii) B (iv) Z (v) C

---

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

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

---

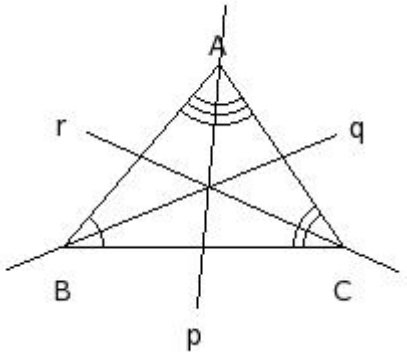
29. Which of the following figures have infinite lines of symmetry?

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

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

---

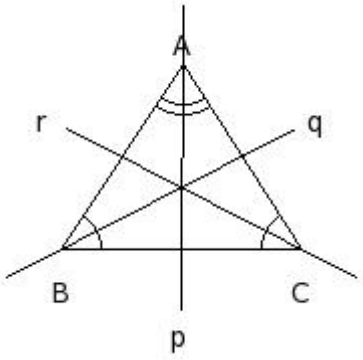
30. Identify the line(s) of symmetry in the following figure



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

---

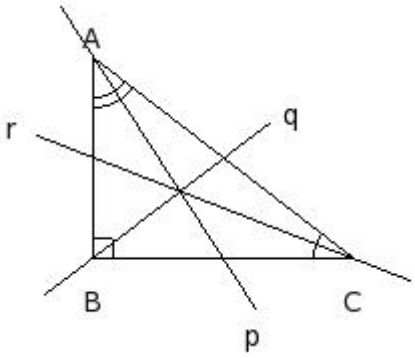
31. Identify the line(s) of symmetry in the following figure



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

---

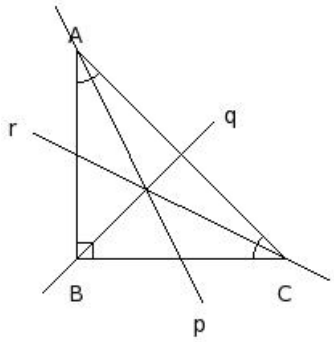
32. Identify the line(s) of symmetry in the following figure



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

---

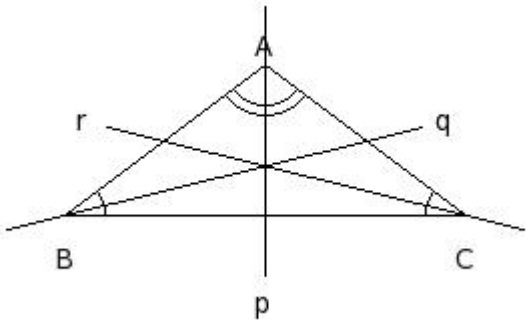
33. Identify the line(s) of symmetry in the following figure



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

---

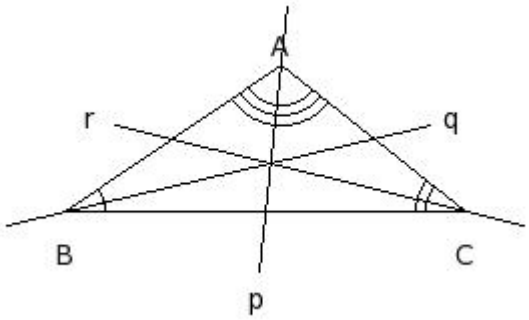
34. Identify the line(s) of symmetry in the following figure



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

---

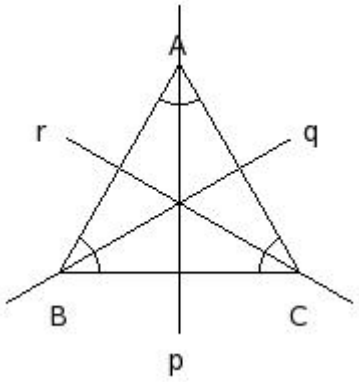
35. Identify the line(s) of symmetry in the following figure



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

---

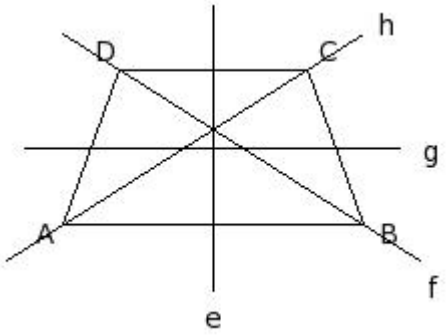
36. Identify the line(s) of symmetry in the following figure



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

---

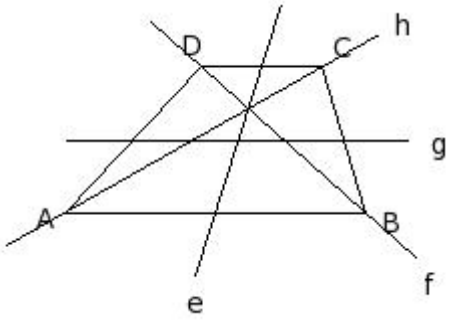
37. Which of the following are line(s) of symmetry for the given isosceles trapezium ?



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

---

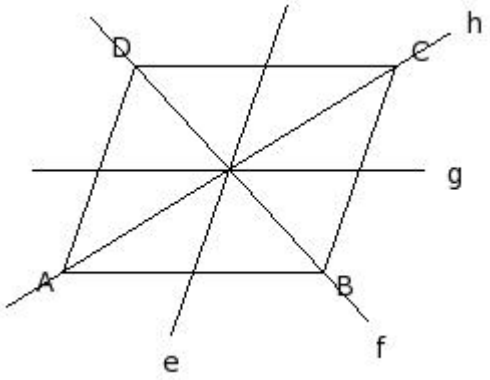
38. Which of the following are line(s) of symmetry for the given trapezium ?



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

---

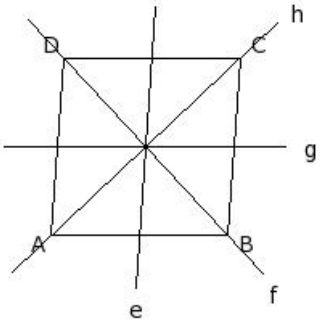
39. Which of the following are line(s) of symmetry for the given parallelogram ?



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

---

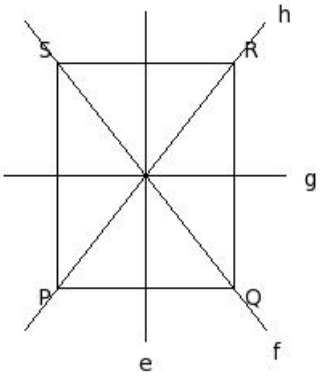
40. Which of the following are line(s) of symmetry for the given rhombus ?



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

---

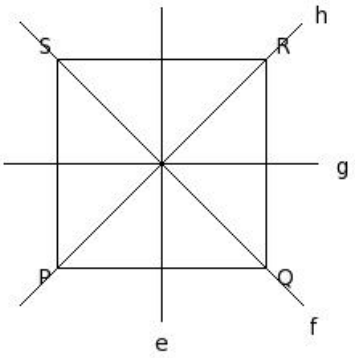
41. Which of the following are line(s) of symmetry for the given rectangle ?



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

---

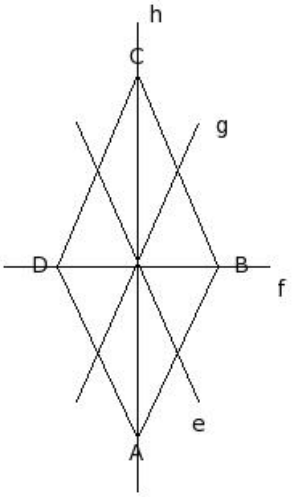
42. Which of the following are line(s) of symmetry for the given square ?



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

---

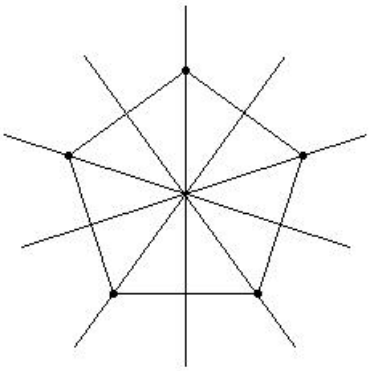
43. Which of the following are line(s) of symmetry for the given kite ?



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

---

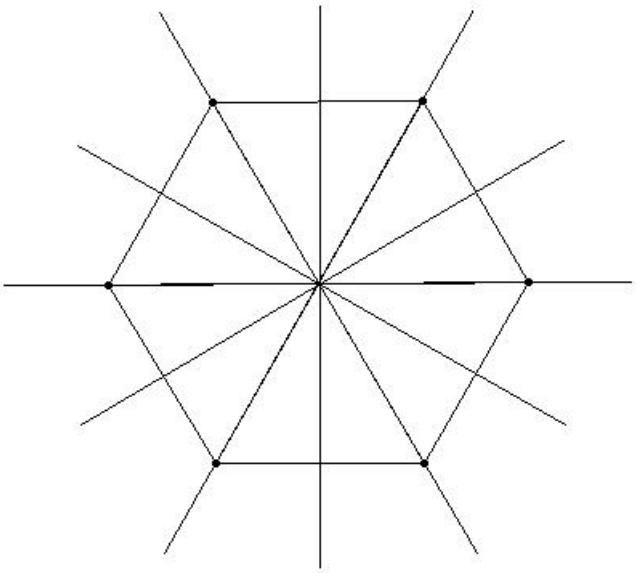
44. Given figure has how many lines of symmetry?



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

---

45. Given figure has how many lines of symmetry?



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

Assignment Key

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

40) (iv)
41) (iv)
42) (iii)
43) (v)
44) (iii)
45) (ii)