



MATHS

BOOKS - RD SHARMA MATHS

(ENGLISH)

SYMMETRY

Others

1. Following letters of English alphabet are symmetrical about a line. Identify, a line of

symmetry in each case: (i) A (ii) B (iii) C (iv) D

(v) E



[Watch Video Solution](#)

2. Each of the following letters from English alphabet has two lines of symmetry. Identify lines of symmetry in each case: (i)

H

(ii) I

(iii) O



[Watch Video Solution](#)

3. State the number of lines of symmetry for the following figures: (i) An equilateral triangle (ii) An isosceles triangle



[Watch Video Solution](#)

4. State the number of lines of symmetry for the following figures: (i) A scalene triangle (ii) A rectangle



[Watch Video Solution](#)

5. State the number of lines of symmetry for the following figures: (i) A

rhombus

(ii) A square



[Watch Video Solution](#)

6. State the number of lines of symmetry for the following figures: (i) A

parallelogram

(ii) A quadrilateral



[Watch Video Solution](#)

7. State the number of lines of symmetry for the following figures: (i) A regular pentagon (ii) A regular hexagon



[Watch Video Solution](#)

8. State the number of lines of symmetry for the following figures: (i) A circle (ii) A semi-circle



[Watch Video Solution](#)

9. What other name can give to the line of symmetry of (i) An isosceles triangle? (ii) A circle?



[Watch Video Solution](#)

10. Fill in the blanks: English alphabet Letter, Line Symmetry, Number of Lines of symmetry, Rotational Symmetry, Order of rotational Symmetry Z S H O E N C, Nil - Yes Yes Yes --, 0 -- ----, Yes - Yes Yes - Yes -, 2 - - - - -



[Watch Video Solution](#)

11. Identify multiple lines of symmetry, if any, in each of the following figures:



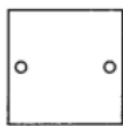
Watch Video Solution

12. In the following figures, the mirror line (i.e. the line of symmetry) is given as dotted line. Complete each figure performing in the dotted (mirror) line. Also, try to recall the name of the complete figure.

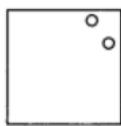


Watch Video Solution

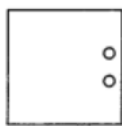
13. Copy the figures with punched holes and find the axes of symmetry for the following:



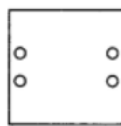
(a)



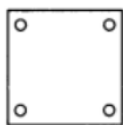
(b)



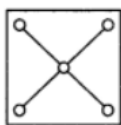
(c)



(d)



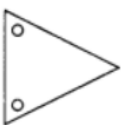
(e)



(f)



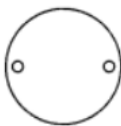
(g)



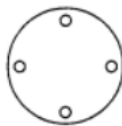
(h)



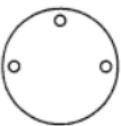
(i)



(j)



(k)



(l)



Watch Video Solution

14. Given the line(s) of symmetry, find the other hole(s):



Watch Video Solution

15. Discuss the rotational symmetry and line symmetry of an equilateral triangle.



Watch Video Solution

16. Discuss the rotational symmetry of a square. Also, determine its lines of symmetry.



[Watch Video Solution](#)

17. Discuss the rotational and line symmetry of a rectangle.



[Watch Video Solution](#)

18. Show that each of the letters H, I, N, S, X and Z has a rotational symmetry of order 2. Also, mark the point of rotational symmetry in each case.



[Watch Video Solution](#)

19. Discuss the rotational and line symmetry of a circle.



[Watch Video Solution](#)

20. Discuss the rotational symmetry of a parallelogram. Also, find the centre of rotation, if any.

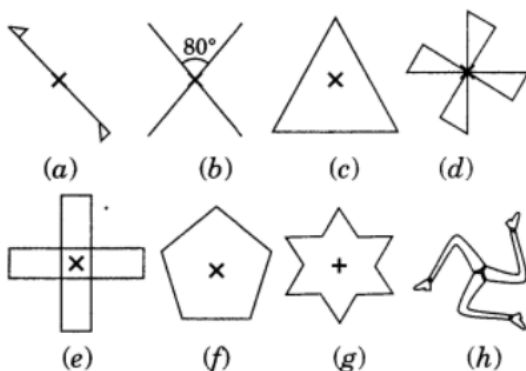


[Watch Video Solution](#)

21. Discuss the rotational and line symmetry of the following figure.

 [Watch Video Solution](#)

22. Give the order of rotational symmetry for each figure:



 [Watch Video Solution](#)

23. Name any two figures that have both line symmetry and rotational symmetry.



Watch Video Solution

24. Give an example of a figure that has a line of symmetry but does not have rotational symmetry.



Watch Video Solution

25. Give an example of a geometrical figure which has neither a line of symmetry nor a rotational symmetry.



Watch Video Solution

26. Give an example of a letter of the English alphabet which has (i) No line of symmetry (ii) Rotational symmetry of order 2.



Watch Video Solution

27. What is the line of symmetry of a semi-circle? Does it have rotational symmetry?



Watch Video Solution

28. Draw a rough sketch of a triangle with both line and rotational symmetries.



Watch Video Solution

29. Fill in the blanks: Figures, Centre of rotation, Order of rotation, Angle of rotation
Square, , , Rectangle, , , Rhombus, , , Equilateral triangle, , , Regular hexagon, , , Circle, , , Semi-circle, , ,



Watch Video Solution

30. Give three examples of shapes with no line of symmetry.



Watch Video Solution

31. Which of the following has only 2 lines of symmetry?

A. Equilateral triangle

B. Rhombus

C. Circle

D. None of these

Answer: B



Watch Video Solution

32. Which of the following is/are point symmetric? (a) Rectangle (b) Square (c) Parallelogram (d) All of these



Watch Video Solution

33. Which of the following has an infinite number of lines of symmetry? (a) Equilateral triangle (b) Isosceles triangle (c) Regular hexagon (d) Circle



 [Watch Video Solution](#)

34. Which of the following is point symmetric?

(a) Equilateral triangle (b) Trapezium

(c) Rectangle (d) None of

these



[Watch Video Solution](#)

35. The number of lines of symmetry of a

square is (a) 2 (b) 3 (c)

4 (d) Infinite



[Watch Video Solution](#)

36. The number of lines of symmetry of a rectangle is (a) 2 (b) 3 (c) 4 (d) 1



[Watch Video Solution](#)

37. The number of lines of symmetry of an equilateral triangle is (a) 1 (b) 2 (c) 3 (d) 0



Watch Video Solution

38. The order of rotational symmetry of an equilateral triangle is

A. 0

B. 1

C. 2

D. 3

Answer: D



Watch Video Solution

39. The rectangle has rotational symmetry of order (a) 1 (b) 2 (c) 3 (d) 4



Watch Video Solution

40. The number of lines of symmetry of an isosceles triangle is (a) 0 (b) 1 (c) 2 (d) 3



Watch Video Solution

