



INDIAN SCHOOL NIZWA-WORKSHEET

	MATHEMATICS	
	CH – 9 – SYMMETRY	
Name: _____	Date: _____	Class: VI Sec: ___

Choose the correct answer:

- How many lines of symmetry does a regular pentagon have?
a) 1 b) 3 c) 5 d) 7
- Which of the following figures have no line of symmetry?
a) Circle b) Rectangle c) Square d) Scalene triangle
- What is symmetry?
a) A pattern that repeats in a definite way
b) A pattern that changes shape randomly
c) A random arrangement of shapes
d) None of the above
- What is the smallest angle of rotational symmetry for a regular hexagon?
a) 60° b) 90° c) 120° d) 180°
- Which shape has infinite lines of symmetry?
a) Circle b) Triangle c) Square d) Pentagon
- How many lines of symmetry does a square have?
a) 1 b) 2 c) 3 d) 4
- The order of rotational symmetry of an equilateral triangle is:
a) 1 b) 2 c) 3 d) 4
- A line that divides a figure into two equal mirror halves is called:
a) Reflection line c) Rotational axis
b) Axis of symmetry d) a and b both
- Which of the following figures has no reflection symmetry and no rotational symmetry?
a) Circle b) Scalene triangle c) Equilateral triangle d) Regular pentagon
- How many lines of symmetry does Ashoka Chakra have?
a) 12 b) 24 c) 48 d) 10
- Which of the following figure has only one line of symmetry?
a) Square b) Circle c) Equilateral triangle d) Isosceles triangle
- Which of the following figure does not have any symmetry?
a) Circle b) Rectangle c) Kite d) Irregular Shape

Write (T) for True or (F) for False:

13. Every shape with a line of symmetry must also have rotational symmetry.
14. A rectangle has two lines of symmetry.
15. The number of angles of symmetry in a hexagon is four.
16. A circle has an infinite number of lines of symmetry.
17. The smallest angle of symmetry in the Ashoka Chakra is 30° .

Fill in the blanks:

18. A line that divides a figure into two identical halves is called a _____ of symmetry.
19. The shape of a _____ remains the same when rotated by any angle.
20. A figure with no line of symmetry is called _____
21. When a shape has a line of symmetry, one part of the shape is a _____ of the other.
22. The _____ is the point around which a figure is rotated in rotational symmetry.

Answer the following questions:

23. Draw lines of symmetry for the following shapes:

a)



24. Define rotational symmetry.
25. Define reflectional symmetry.
26. What happens if a shape does not match when folded along a line?
27. Priya sketches a regular octagon for a project. What is the order of its rotational symmetry?
28. Ritu sees a leaf with a central vein where both sides are mirror images. How many lines of symmetry does the leaf have?
29. Ayan rotates a circular plate by 45° . Does it still look the same, indicating rotational symmetry?
30. Draw a shape which does not have a line of symmetry.