

St. Andrews Scots Sr. Sec. School

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Session: 2024-25

Worksheet

Class: VII	Subject: Mathematics	Topic: Reflection and symmetry	Worksheet 14
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Solve these:

1. How many lines of symmetry do the following have:

- (a) a parallelogram
- (b) an equilateral triangle
- (c) a right angle with equal legs
- (d) an angle with equal arms
- (e) a semicircle
- (f) a rhombus
- (g) a square

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

3. Can we have a rotational symmetry of order more than 1 whose angle of rotation is

- (i) 45° ?
- (ii) 17° ?

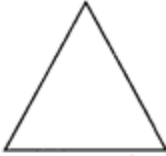
4. What letters of the English alphabet have reflectional symmetry (i.e., symmetry related to mirror reflection) about.

- (a) a vertical mirror
- (b) a horizontal mirror
- (c) both horizontal and vertical mirrors

5. Draw any two English alphabets having an only a vertical line of symmetry.

6. Draw any two English alphabets having both horizontal and vertical line of symmetry.

7. State the order of rotational symmetry of the following figures.



Equilateral triangle

(i)

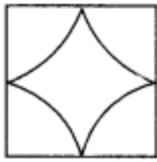


Regular pentagon

(ii)

8. Draw a figure having an infinite number of lines of symmetry.

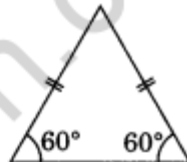
9. Give the order of rotational symmetry of each of the following figures:



(a)



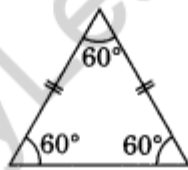
(b)



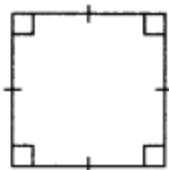
(c)



(d)



(e)



(f)

10. Draw any two figures which have the order of rotational symmetry 2.