Sub: Algebra Geometry   **Class: 7**   **Date: 08. 06.20**
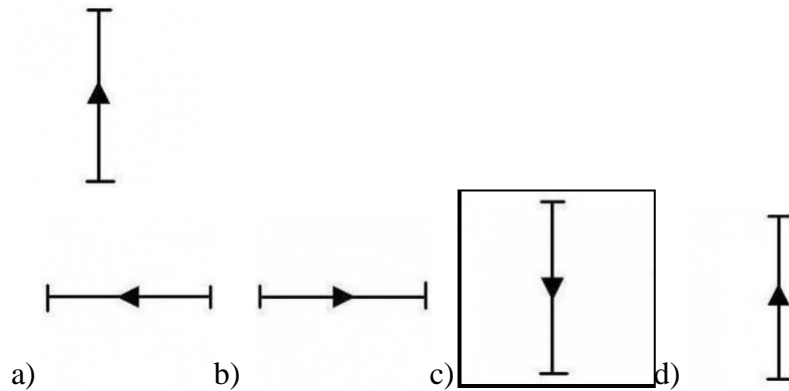**Duration: 40 min**   **Worksheet Solution 26**   **Full Marks: 15**
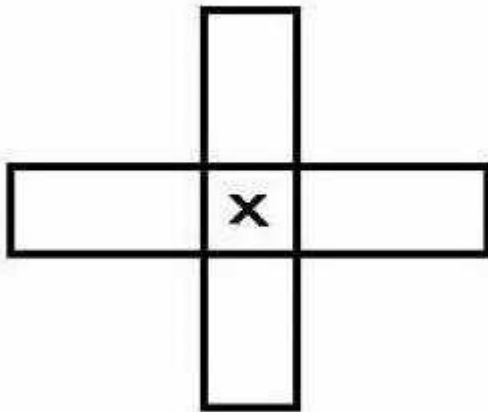### ROTATIONAL SYMMETRY

Choose the Correct options:

1) In the figure below, shows the original position of letter I. Which of the following figures shows the rotational symmetry of letter I when it is rotated through 180°?

a)   b)   c)   d)

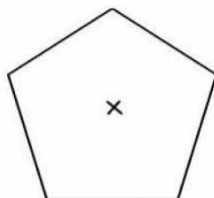2) The order of rotational symmetry of the given figure is _____.

a) 2   b) 3   c) 5   **d) 4**

3) The order of rotational symmetry of an equilateral triangle is _____.
a) 5   b) 2   **c) 3**   d) 4

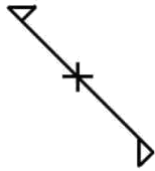4) The order of rotational symmetry of the given figure is _____.

a) 2   b) 4   c) 3   **d) 5**

5) An isosceles triangle has rotational symmetry of order _____.
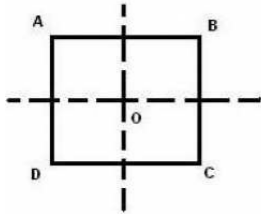a) 4   **b) 0**   c) 2   d) 3

6) The order of rotational symmetry of the given figure is _____.
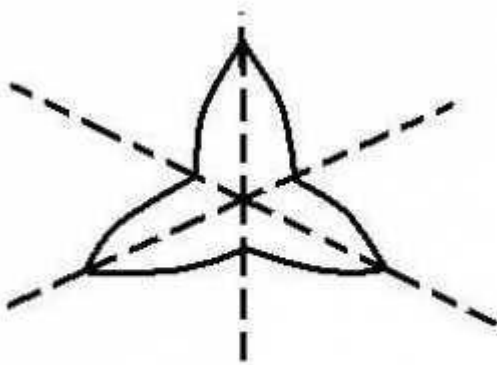
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a) 2   b) 4 c) 5   d) 3

7) In the figure below, ABCD is a square. Which of the following figures shows the rotational symmetry of the given square when it is rotated through 360°?

a)   b)   c)   d)
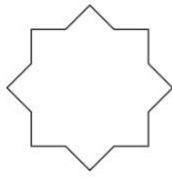
8) The order of rotational symmetry of the given figure is ____.

a) 3   b) 2   c) 6   d) 4

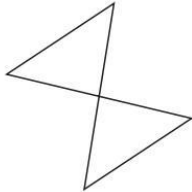9) Which of the following letters does not have a line symmetry, but has a rotational symmetry:
a) H   b) I   c) **Z**   d) X

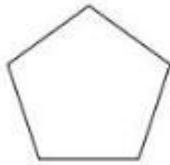10) Identify the smallest angle of rotation that maps the image to itself.

   a) 90° b)180° **c)45°** d) 60°

11) Identify the smallest angle of rotation that maps the image to itself.

a) 180° b) 360° c) 90°   d) No rotational symmetry

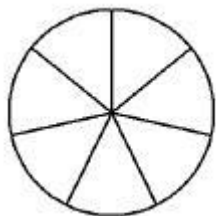12) Identify the smallest angle of rotation that maps the image to itself.

   a) **72°**   b) 180°   c) 144°   d) 45°
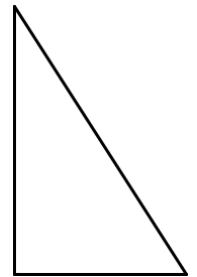
13) What is(are) the angle(s) of rotation needed to rotate a right triangle onto itself?

a) 60°   b) 120°   c) 180°   **d) it does not have rotational symmetry**

14) What is the order of rotational symmetry for this design?

   a) 1 b) 2 c) 5   **d) 7**

15) Which of the following figures have 2D rotational symmetry with their order of symmetry correctly labelled?

(I)   Order 1   (II)   Order 2 (III)   Order 3 **(IV)**   Order 4

   (a) **I and II** (b) II and III (c) III and IV (d) I and IV

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