Fill In The Blanks

1. Rotation turns an object above a fixed point. This fixed point is called ....

2. Order of rotational symmetry of a circle is ....

3. Rhombus is a figure that has ....lines of symmetry and has a rotational symmetry of order ....

4.................... is a figure that has neither a line of symmetry non a rotational symmetry.

5. There is/are .... lines of symmetries in an isosceles triangle.

True(T) Or False(F)

1. A regular pentagon has no lines of symmetry.

2. A scalene triangle has no line of symmetry.

3. Mirror reflection always leads to symmetry.

4. The number of lines of symmetry of a regular polygon is equal to the vertices of the polygon.

5. An angle has two line symmetry.

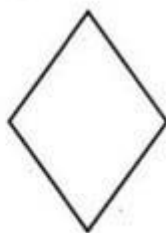**Very Short Answer Type Questions**

1. Draw all the lines of symmetry for the following letters of they exist.
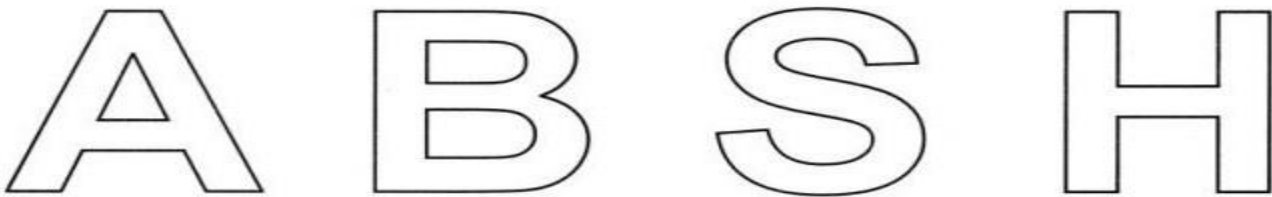
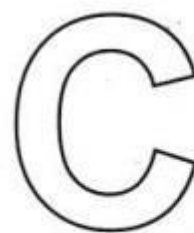2. Tell whether each figure has rotational symmetry or not.

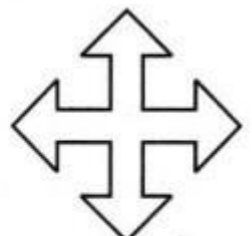(i)   (ii)   (iii)   (iv)
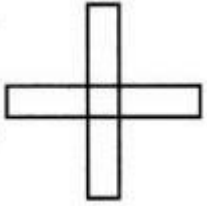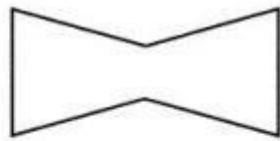
Short Answer Type Questions

1. Angle of rotation of a figure is 40°. What is the number of lines of symmetry.

2. What is the centre of rotation of a an equilateral triangle?

3. In the given figure:

(a) Find the order of rotational symmetry.

(b) Find the degree measure of the angle of rotation.

4. Draw all lines of symmetry for each of the following figures given below:
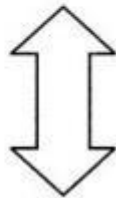

(i)

(ii)

(iii)

(iv)

Long Answer Type Questions

1. After rotation by 60° about a centre, a figure looks exactly the same as its original position. At what other angles will this happen for the figure?

2. 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

3. What other name can you give to the line of symmetry of

(a) an isosceles triangle

(b) a circle