Rotational and Point Symmetry

If you can rotate a figure around a centre point by fewer than 360° and the figure appears unchanged, than the figure has rotational symmetry. The point around which you rotate is called the centre of rotation, and the smallest angle you need to turn is called the angle of rotation.

We can easily observe that a certain picture looks identical when it is rotated about a certain point at a certain degree. For Example, a square lamina, when rotated around an axis by 90°, 180° or 270°, retains its shape.

| Original shape | Rotated at an angle 45° | Rotated at an angle 90° (Match with original figure) | Rotated at an angle 135° | Rotated at an angle 180° (Match with original figure) | Rotated at an angle 225° | Rotated at an angle 270° (Match with original figure) |

Identical shapes