

CHAPTER 08

Exploring Geometrical Figures

Congruency of shapes:

Flip:

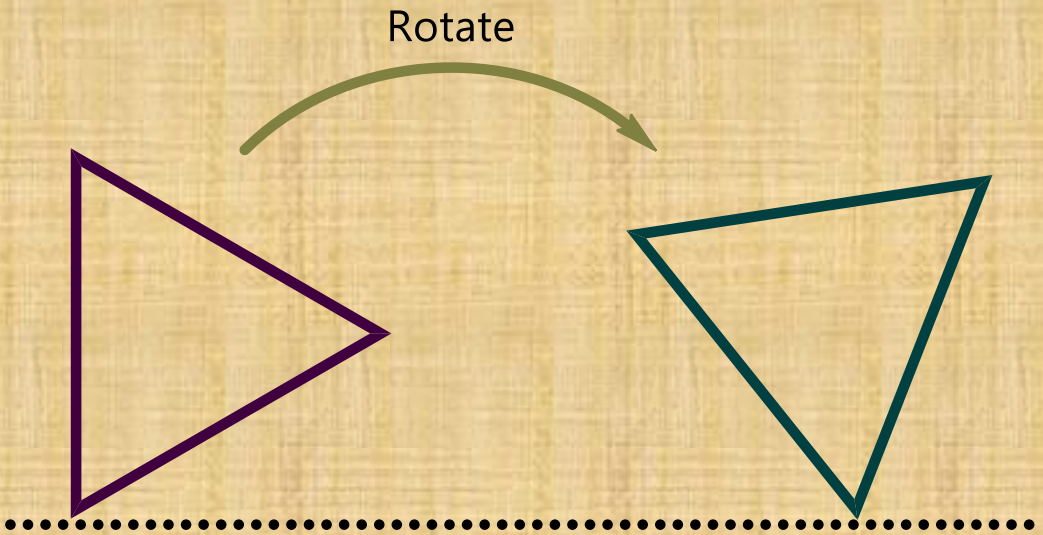
Flip is a transformation in which a plane figure is reflected across a line, creating a mirror image of the original figure.



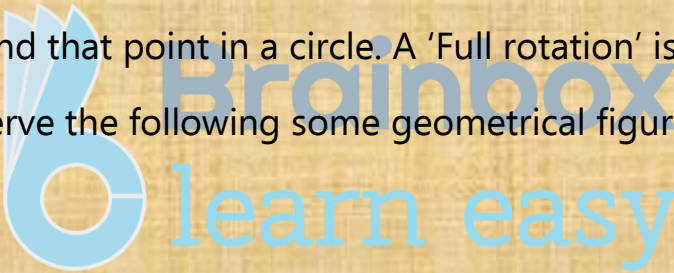
After a figure is flipped or reflected, the distance between the line of reflection and each point on the original figure is the same as the distance between the line of reflection and the corresponding point on the mirror image.

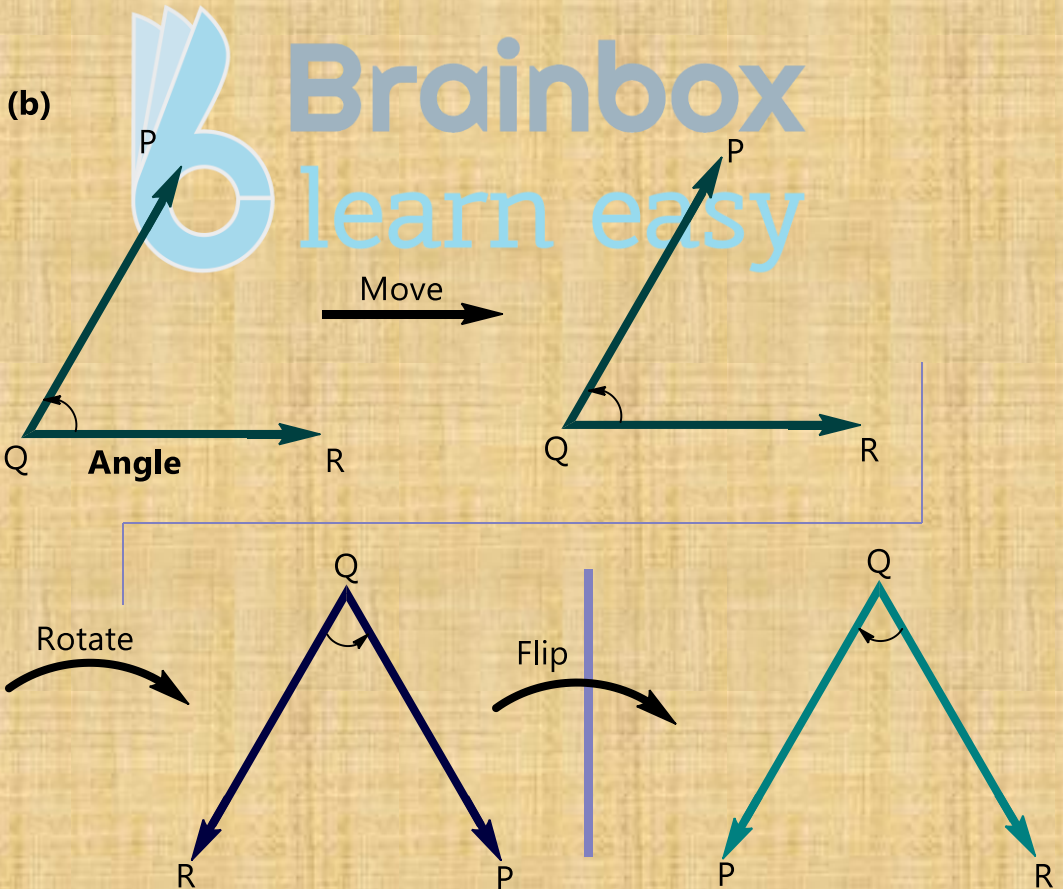
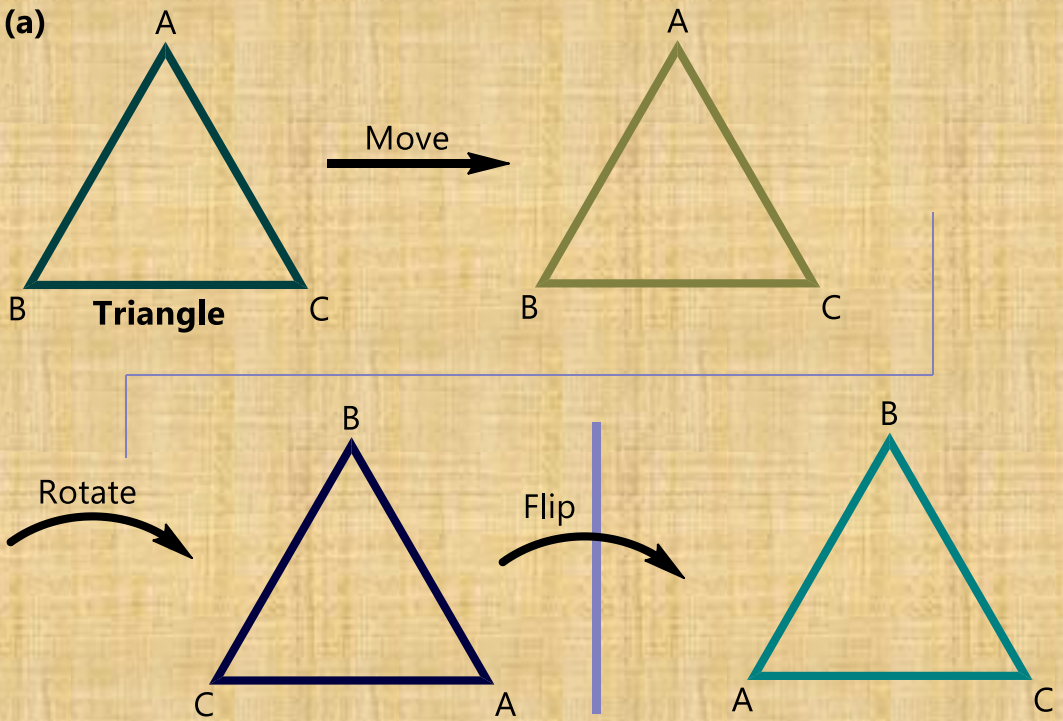
Rotation:

‘Rotation’ means turning around a centre. The distance from the centre to any point on the shape stays the same. Every point makes a circle around the centre.

**Note:**

- Central point that stays fixed and everything else moves around that point in a circle. A 'Full rotation' is 360° .
- Observe the following some geometrical figures.





In above all cases if the first figure in the row is moved, rotated and flipped but the figures in every row are congruent they represent the same shape and size but oriented differently. The shapes are congruent if we reflect the shapes by producing their mirror images.

