SYMMETRY

Line of Symmetry: A line that divides a figure into two parts such that, when the figure is folded along the line, the two parts of the figure coincide.
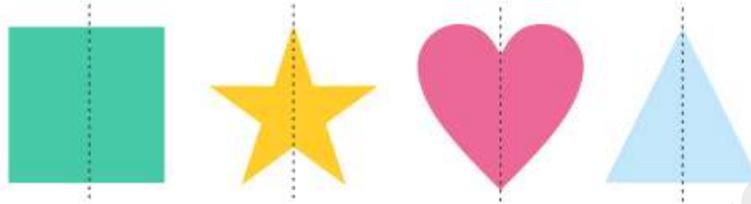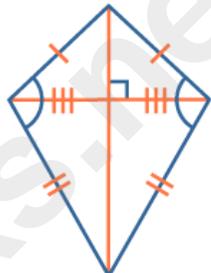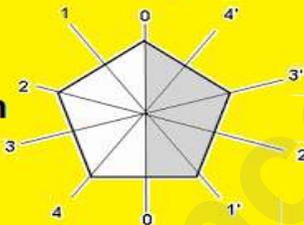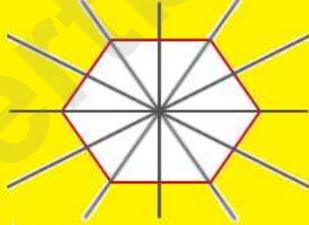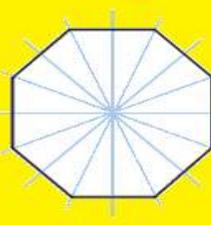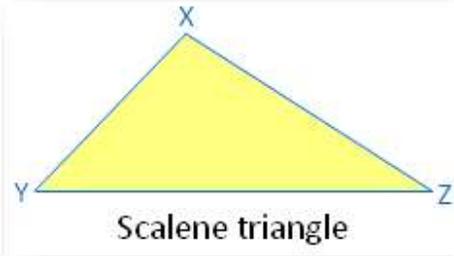

Figures	No . of Lines symmetry	Lines of Symmetry
Isosceles Triangle	1	
Equilateral Triangle	3	
Rhombus	2	
Rectangle	2	
Square	4	
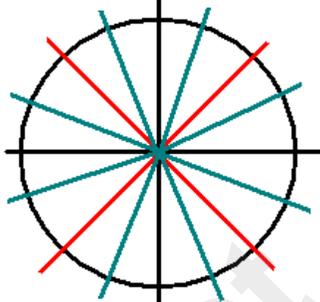
Circle	**Infinite**	
Kite	**1**	

Polygon with n sides has n lines of symmetry

Polygon	Pentagon	Hexagon	Octagon
Lines of Symmetry	5	6	8

No line of symmetry

Parallelogram

Scalene triangle

Reflection

Reflection of a point P

In the line y = 0 i.e. in the x-axis
   The mirror image of the point P (a, b) is P' (a, -b)
   The sign of its ordinate changes

In the line x = 0 i.e. in the y-axis
   The mirror image of the point P (a, b) is P'' (-a, b)
   The sign of its abscissa changes

In the origin
   The mirror image of the point P (a, b) is P''' (-a, -b)
   The sign of its ordinate and abscissa changes