Symmetry Formulas

1. If a line divides a figure into two parts such that when the figure is folded about the line the two parts of the figure coincide, then the line is known as the line of symmetry. The line of symmetry is also known as the axis of symmetry.

2. A figure is said to have rotational symmetry if it fits on to itself more than once during a full turn i.e. rotation through 360°.

3. The number of times a figure fits onto itself in one full turn is called the order of rotational symmetry.

4. Following table provides the details of linear and rotational symmetries of various figures:

Figure	Line symmetry	No. of Line symmetry	Rational Symmetry	Centre of Rotation	Order of Rotational Symmetry
Square	Yes	4	Yes	Intersection of diagonals	4
Rectangle	Yes	2	Yes	Intersection of diagonals	2
Equilateral Triangle	Yes	3	Yes	Centroid	3
Regular Hexagon	Yes	6	Yes	Centre of the hexagon	6
Circle	Yes	Unlimited	Yes	Centre	Unlimited
Parallelogram	Yes	2	Yes	Intersection of diagonals	2
Rhombus	Yes	2	Yes	Intersection of diagonals	2