

ATOMIC ENERGY CENTRAK SCHOOL-4,

ANUSHAKTINAGAR, MUMBAI.

CLASS 9, MATHEMATICS,

UNIT: LINES AND ANGLES

MODULE 2

Parallel Lines And Transversal:

Transversal :- A *transversal*, or a line that intersects two or more coplanar lines, each at a different point, is a very useful line in geometry. Transversals tell us a great deal about angles.

Parallel Lines :- Parallel lines remain the same distance apart over their entire length. No matter how far you extend them, they will never meet.

Angles formed by parallel lines and transversal

- Corresponding Angles
- Alternate Interior Angles
- Alternate Exterior Angles
- Interior Angles On The Same Side Of the transversal

Corresponding angles: The angles that occupy the same relative position at each intersection where a straight line crosses two others. If the two lines are parallel, the corresponding angles are equal.

- Alternate Interior Angles
- When two parallel lines are cut by a transversal, the two pairs of angles on opposite sides of the transversal and outside the parallel lines, and the angles in each pair are congruent.
- Alternate Exterior Angles
- When two parallel lines are cut by a transversal, the two pairs of angles on opposite sides of the transversal and outside the parallel lines, and the angles in each pair are congruent.
- Interior Angles On The Same Side Of the transversal
- Interior angles on the same side of the transversal are also referred to as consecutive interior angles or allied angles or co-interior angles. Further, many a times, we simply use the words alternate angles for alternate interior angles.