

6th – Basic Geometrical Ideas III



When the distance between a pair of lines is always the same, then we call such lines as parallel lines. The symbol for “parallel to” is “// “. Parallel lines are the lines which never meet each other.

A transversal is a line that passes through two lines lying in the same plane at two distinct points.

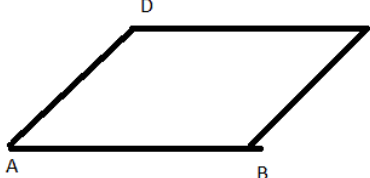
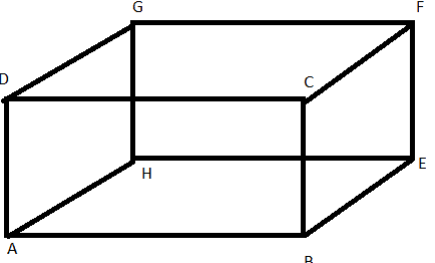
Linear Pair: when two adjacent angles form a straight line, they are called as linear pair.

The angles formed when a transversal intersects two lines are as follows:

1. Interior angles
2. Exterior angles
3. Corresponding angles: they lie on the same side of the transversal
4. Alternate angles: they lie on opposite sides of transversal

1	Find the pairs of: a) Corresponding angles b) Alternate interior angles c) Alternate exterior angles	
2	Identify the given angles	
3.	From the given figure, answer the following questions: a) Corresponding to $\angle 2$ b) Corresponding to $\angle 1$ c) Corresponding to $\angle 5$ d) Corresponding to $\angle 3$ e) Alternate to $\angle 2$ f) Alternate to $\angle 4$ g) Alternate to $\angle 1$ h) Alternate to $\angle 6$	
4.	Find the supplement of the following angles: a) 155 b) 199 c) 100 d) 28 e) 30 f) 144 g) 177 h) 152 i) 139	
5	Find the complement of the following angles: a) 29 b) 17 c) 33 d) 24 e) 44 f) 46 g) 45 h) 89 i) 66	
6.	Identify the parallel line segments:	

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7.	Identify the parallel line segments:	
8.	Name the pairs of all possible parallel edges of the pencil box whose figure is shown in the figure	
9.	Check whether the following are supplementary or not: a) 123 and 57 b) 67 and 114 c) 89 and 91	
10.	Check whether the following are complementary or not: a) 55 and 45 b) 66 and 34 c) 89 and 1	