TRIGONOMETRY

Points to Remember

- An equation involving trigonometric ratios of an angle is called a trigonometric identity if it is true for all values of the angle.

- Trigonometric identities

  (i) $\sin^2 \theta + \cos^2 \theta = 1$ (ii) $1 + \tan^2 \theta = \sec^2 \theta$ (iii) $1 + \cot^2 \theta = \csc^2 \theta$

- The line of sight is the line drawn from the eye of an observer to the point in the object viewed by the observer.

- The angle of elevation of an object viewed is the angle formed by the line of sight with the horizontal when it is above the horizontal level.

- The angle of depression of an object viewed is the angle formed by the line of sight with the horizontal when it is below the horizontal level.

- The height or length of an object or distance between two distant objects can be determined with the help of trigonometric ratios.