St. Cecilia's Public School
Mental Maths Activity
Class XI and XII
Topic: Rotation of angle in different Quadrant

To develop the understanding of Trigonometry in Class XI and to recall the rotation of angles through Quadrants in Class XII.

The activity was designed in the form of "Rapid Fire round " of formulae building in the Trigonometry. Students Participated enthusiastically.

Rapid Fire round of few formulae was thrown to the students and they were expected to answer it quickly after identifying the quadrant of the angle and corresponding sign of the trigonometric ratio. Students enjoyed the activity and learned the significance of angle more than 360° in the daily life. Some examples of the formulae are as follows:

$\sin(\pi + \theta) =$ $\sin(\pi - \theta) =$

$\cos(\pi + \theta) =$ $\cos(\pi - \theta) =$

$\tan(\pi + \theta) =$ $\tan(\pi - \theta) =$

$\cot(\pi + \theta) =$ $\cot(\pi - \theta) =$

$\operatorname{cosec}(\pi + \theta) =$ $\sec(\pi - \theta) =$

$\sec(\pi + \theta) =$ $\operatorname{cosec}(\pi - \theta) =$

The activity is observed very useful for students and they learned the basics of higher Trigonometry.