



Grade 12 GEN

Lesson 9-2
trigonometric
functions of
General angles.

Objectives

Find values of
trigonometric
functions for
acute angles.
Reference Angle

Exp-1-

The point $M(-2, 0)$ is on the terminal side of a standard angle.

Find the values of the given trigonometric functions.

$$\sin \theta = \boxed{}$$

$$\tan \theta = \boxed{}$$

$$\cos \theta = \boxed{}$$

$$\sec \theta = \boxed{}$$

$$\sin \theta = \frac{y}{r} \quad \cos \theta = \frac{x}{r} \quad \tan \theta = \frac{y}{x} \quad \sec \theta = \frac{r}{x}$$

Exp-2-

Trigonometric Values for Special Angles

θ	30° or $\frac{\pi}{6}$	45° or $\frac{\pi}{4}$	60° or $\frac{\pi}{3}$
$\sin \theta$			
$\cos \theta$			
$\tan \theta$			

$\frac{\sqrt{2}}{2}$

$\frac{1}{2}$

$\frac{\sqrt{3}}{2}$

$\frac{1}{2}$

$\frac{\sqrt{2}}{2}$

$\frac{\sqrt{3}}{2}$

1

$\frac{\sqrt{3}}{3}$

$\sqrt{3}$