

Name :

Class :

Trigonometric Expressions



A trigonometric expression is a mathematical expression that involves trigonometric functions, such as: Sine (sin) Cosine (cos) Tangent (tan) Cotangent (cot) Secant (sec) Cosecant (csc).

Sine	Sin	$\text{Sin } \angle B = \frac{\text{Opposite}}{\text{Hypotenuse}}$
Cosine	Cos	$\text{Cos } \angle B = \frac{\text{Adjacent}}{\text{Hypotenuse}}$
Tangent	Tan	$\text{Tan } \angle B = \frac{\text{Opposite}}{\text{Adjacent}}$
Secant	Sec	$\text{Sec } \angle B = \frac{\text{Hypotenuse}}{\text{Adjacent}}$
Cosecant	Csc	$\text{Csc } \angle B = \frac{\text{Hypotenuse}}{\text{Opposite}}$
Cotangent	Cot	$\text{Cot } \angle B = \frac{\text{Adjacent}}{\text{Opposite}}$

Evaluate each expression.

1) $\sin 45^\circ + 7 \cos 0^\circ$

2) $\cos \frac{\pi}{2} \sin \frac{\pi}{3}$

3) $\tan 0^\circ - \cos 30^\circ$

4) $\frac{3 + \sin^2 90^\circ}{4}$

5) $3\left(\tan \frac{\pi}{6} + \sin \frac{\pi}{3}\right)$

6) $\frac{\tan 60^\circ}{\sin 30^\circ - \cos 45^\circ}$