

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	$\sin \angle B = \frac{\text{Opposite}}{\text{Hypotenuse}}$
Cosine	Cos	$\cos \angle B = \frac{\text{Adjacent}}{\text{Hypotenuse}}$
Tangent	Tan	$\tan \angle B = \frac{\text{Opposite}}{\text{Adjacent}}$
Secant	Sec	$\sec \angle B = \frac{\text{Hypotenuse}}{\text{Adjacent}}$
Cosecant	Csc	$\csc \angle B = \frac{\text{Hypotenuse}}{\text{Opposite}}$
Cotangent	Cot	$\cot \angle B = \frac{\text{Adjacent}}{\text{Opposite}}$

Evaluate each expression.

1) $2 \cos \frac{19\pi}{3} + \sin \frac{7\pi}{3}$

2) $\frac{\tan 420^\circ}{5}$

3) $\sec 780^\circ - 8$

4) $\csc \frac{25\pi}{4} + \sec \frac{13\pi}{3}$

5) $\tan 60^\circ \csc 390^\circ \cot 225^\circ$

6) $11 \cot \frac{5\pi}{2}$