

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)
$$\frac{\tan^2 \frac{\pi}{4} + \cos^2 \frac{\pi}{3} \sin^2 0}{\cos X}$$



2) $9 - 2 \tan 30^\circ$



3)
$$\frac{\tan 60^\circ}{\sin 30^\circ - \cos 45^\circ}$$



4)
$$\frac{\tan^2 \frac{\pi}{6} \cos^2 0}{6}$$



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



6) $\sin 30^\circ + \tan 0^\circ - \cos 60^\circ$

