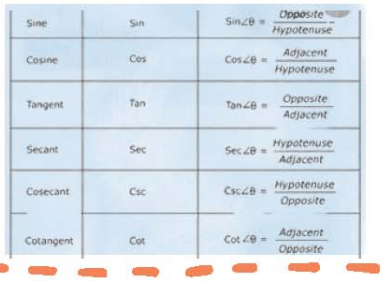
Name : Class :

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).



Simplify the following trigonometric expression.

1) $\dfrac{\tan^2 t + 1}{1 + \cot^2 t}$

2) $\dfrac{\sec t \tan t}{\tan^2 t + 1}$

3) $\dfrac{1}{\sec t - \tan t} - \dfrac{1}{\sec t + \tan t}$

4) $\dfrac{\sin^2 t \cot^2 t}{1 - \sin^2 t}$

5) $\sec t \tan t \cos t$

6) $\dfrac{\cos^2 t - 1}{\cos^2 t \tan^2 t}$