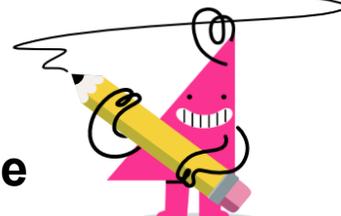




Trigonometry Identities - Pythagorean Ratio Cancellation (with Identity, Single Identity and Cot/Tan) 2



1

Using: Simplify this expression using trig identities

$$\tan^2(\gamma) = \frac{\sin^2(\gamma)}{\cos^2(\gamma)}$$

$$\cos^2(\gamma) + \sin^2(\gamma) = 1$$

A	B
$\cot^2(\gamma)$	$\sin^2(\gamma)$

Simplify: $(\tan^2(\gamma))(1 - \sin^2(\gamma))$

2

Using: Simplify this expression using trig identities

$$\cos^2(\alpha) + \sin^2(\alpha) = 1$$

$$\cot^2(\alpha) = \frac{\cos^2(\alpha)}{\sin^2(\alpha)}$$

A	B
$\cos^2(\alpha)$	$\sin^2(\alpha)$

Simplify: $(1 - \cos^2(\alpha))(\cot^2(\alpha))$

3

Using: Simplify this expression using trig identities

$$\cot^2(\alpha) = \frac{\cos^2(\alpha)}{\sin^2(\alpha)}$$

$$\cos^2(\alpha) + \sin^2(\alpha) = 1$$

A	B
$\csc^2(\alpha)$	$\sin^2(\alpha)$
C	
$\tan^2(\alpha)$	

Simplify: $\frac{\cot^2(\alpha)}{1 - \sin^2(\alpha)}$

4

Using: Simplify this expression using trig identities

$$\tan^2(\beta) = \frac{\sin^2(\beta)}{\cos^2(\beta)}$$

$$\cos^2(\beta) + \sin^2(\beta) = 1$$

A	B
$\cos^2(\beta)$	$\cot^2(\beta)$
C	
$\sin^2(\beta)$	

Simplify: $(\tan^2(\beta))(1 - \sin^2(\beta))$

5

Using: Simplify this expression using trig identities

$$\tan^2(\theta) = \frac{\sin^2(\theta)}{\cos^2(\theta)}$$

$$\cos^2(\theta) + \sin^2(\theta) = 1$$

A	B
$\sin^2(\theta)$	$\cot^2(\theta)$
C	
$\tan^2(\theta)$	

Simplify: $(\tan^2(\theta))(1 - \sin^2(\theta))$

6

Using: Simplify this expression using trig identities

$$\cos^2(\beta) + \sin^2(\beta) = 1$$

$$\cot^2(\beta) = \frac{\cos^2(\beta)}{\sin^2(\beta)}$$

A	B
$\sec^2(\beta)$	$\tan^2(\beta)$
C	
$\cos^2(\beta)$	

Simplify: $(1 - \cos^2(\beta))(\cot^2(\beta))$

7

Using: Simplify this expression using trig identities

$$\cos^2(\gamma) + \sin^2(\gamma) = 1$$

$$\cot^2(\gamma) = \frac{\cos^2(\gamma)}{\sin^2(\gamma)}$$

A	B
$\cos^2(\gamma)$	$\cot^2(\gamma)$
C	
$\csc^2(\gamma)$	

Simplify: $(1 - \cos^2(\gamma))(\cot^2(\gamma))$

8

Using: Simplify this expression using trig identities

$$\tan^2(\theta) = \frac{\sin^2(\theta)}{\cos^2(\theta)}$$

$$\cos^2(\theta) + \sin^2(\theta) = 1$$

A	B
$\cot^2(\theta)$	$\tan^2(\theta)$
C	
$\sec^2(\theta)$	

Simplify: $\frac{\tan^2(\theta)}{1 - \cos^2(\theta)}$