Class Discussion

Unit 5 Topic 2 Verify Trigonometric Identities

Objective: Verify different trigonometric identities

1. $\sin x - \sin x \cos^2 x = \sin^3 x$

2. $\dfrac{\tan x + \cot y}{\tan x \cot y} = \tan y + \cot x$

3. $\sec^4 x - \tan^4 x = 1 + 2\tan^2 x$

4. $\dfrac{\tan^3 x - 1}{\tan x - 1} - \dfrac{\tan^3 x + 1}{\tan x + 1} = 2\tan x$

5. $\dfrac{\cos x - \cos y}{\sin x + \sin y} + \dfrac{\sin x - \sin y}{\cos x + \cos y} = 0$

6. $\dfrac{\sin^2 x + 4\sin x + 3}{\cos^2 x} = \dfrac{3 + \sin x}{1 - \sin x}$