

9.5 Trigonometric Identities day 2 - 2019-20

Prove each trigonometric identity.

1. $\frac{\cot x}{\cos x} = \csc x$

2. $\cot x + \tan x = \csc x \cdot \sec x$

3. $\sin \theta + \frac{\cot \theta}{\sec \theta} = \csc \theta$

4. $\frac{1 - \cos^2 x}{\cos x} \cdot \csc x = \tan x$

5. $\sin^2 \theta (1 + \cot^2 \theta) = 1$

6. $\sec x = \frac{\tan x}{\csc x} + \cos x$