

G11A 4.2 Verifying Trigonometric Identities

Verify each identity.

5. $\cot^2 \theta \csc^2 \theta - \cot^2 \theta = \cot^4 \theta$

6. $\tan \theta \csc^2 \theta - \tan \theta = \cot \theta$

7. $\frac{\sec \theta}{\sin \theta} - \frac{\sin \theta}{\cos \theta} = \cot \theta$

10. $\frac{\sin \theta}{1 - \cot \theta} + \frac{\cos \theta}{1 - \tan \theta} = \sin \theta + \cos \theta$