

Verifying Trig Identities Practice Problems

1. $\sin(x) \csc(x) = 1$
2. $[1 + \sin(x)][1 + \sin(x)] = \cos^2(x)$
3. $\frac{1}{\tan^2(x)+1} = \cos^2(x)$
4. $1 - 2 \sin^2(x) = 2 \cos^2(x) - 1$
5. $\frac{\sec^2(x)-1}{\sec(x)-1} = \sec(x) + 1$
6. $\frac{\csc(x)}{\cot(x)} = \csc(x) \sec(x)$
7. $\sec(x) - \cos(x) = \sin(x) \tan(x)$
8. $\frac{1}{\tan(x)} + \frac{1}{\cot(x)} = \tan(x) + \cot(x)$
9. $\frac{1+\sin(x)}{\cos(x)} + \frac{\cos(x)}{1+\sin(x)} = 2 \sec(x)$
10. $\tan(x) + \cot(x) = \sec(x) \csc(x)$