

## Simplifying Trig Expressions Worksheet A

Simplify each expression

1)  $\sin \theta \cdot \csc \theta$

2)  $\cot \theta \cdot \sec \theta$

3)  $\csc^2 \theta \cdot \cos^2 \theta$

4)  $\cos^2 \theta \cdot \tan \theta \cdot \sec \theta$

5)  $\tan \theta (\csc \theta - \cos \theta)$

6)  $\sin \theta (\csc \theta - \sec \theta)$

7)  $\frac{\cot \theta}{\csc \theta}$

8)  $\frac{\sec^2 \theta}{\tan^2 \theta}$

9)  $\frac{\sin^2 \theta}{\tan^2 \theta}$

10)  $\frac{\sec \theta}{\csc \theta}$

11)  $\sec \theta (\sec^2 \theta - 1) + \sec \theta$

12)  $\frac{\csc^2 \theta \cdot \cos^2 \theta}{\tan^2 \theta}$

$$13) \frac{5}{\csc \theta}$$

$$14) \frac{\sin \theta + 1}{\tan \theta}$$

$$15) \frac{\cos \theta - 1}{\cot \theta}$$

$$16) \frac{\cos \theta + \tan \theta}{\sin \theta}$$

$$17) \sec \theta (2 - \cos \theta)$$

$$18) \tan \theta (\cos \theta + 2 \cot \theta)$$

$$19) (\cos \theta + 1)^2$$

$$20) (1 - \tan \theta)(1 + \tan \theta)$$

$$21) \csc^2 \theta (\sin^2 \theta + 1)$$