

## 9-5 Proofs

Name \_\_\_\_\_

Simplify

1.  $\frac{\tan x \bullet \csc x}{\sec x}$

2.  $\tan x \bullet \csc x \bullet \cos x$

3.  $\frac{\cos^2 \theta}{1 + \sin \theta}$

Verify the following.

4.  $\tan \theta = \frac{\cos \theta}{\sin \theta \bullet \cot^2 \theta}$

5.  $\frac{\tan x \bullet \cos x}{\sin x} = 1$

6.  $\frac{\tan^2 x}{\sec^2 x} = \sin^2 x$

7.  $\sin(90^\circ + \theta) = \cos \theta$

8.  $(1 - \sin x)(1 + \sin x) = \cos^2 x$