

Name \_\_\_\_\_

## 9.7 Practice WS

In Exercises 1–6, find the values of the other five trigonometric functions of  $\theta$ . **DRAW THE TRIANGLE!!**

1.  $\sin \theta = \frac{2}{3}, 0 < \theta < \frac{\pi}{2}$

2.  $\cos \theta = -\frac{3}{5}, \frac{\pi}{2} < \theta < \pi$

3.  $\tan \theta = \frac{4}{7}, \pi < \theta < \frac{3\pi}{2}$

4.  $\cot \theta = -\frac{5}{4}, \frac{\pi}{2} < \theta < \pi$

5.  $\sec \theta = \frac{7}{3}, \frac{3\pi}{2} < \theta < 2\pi$

6.  $\csc \theta = -\frac{6}{5}, \pi < \theta < \frac{3\pi}{2}$

In Exercises 7–10, simplify the expression. Choose 2.

7.  $\cos x \tan x$

8.  $\sin x(\csc^2 x - 1)$

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

10.  $\frac{1 - \sin^2 x}{\sec x}$

In Exercises 11–12, verify the identity. Choose 1.

11.  $\tan x \cot x = 1$

12.  $\sin\left(\frac{\pi}{2} - x\right) \sec x = 1$