Lesson 7-5 Objective: Use the other trig functions.

Tangent: $\quad \tan\theta = \dfrac{y}{x} = \dfrac{\sin\theta}{\cos\theta}$

Cotangent: $\quad \cot\theta = \dfrac{x}{y} = \dfrac{1}{\tan\theta}$

Cosecant: $\quad \csc\theta = \dfrac{r}{y} = \dfrac{1}{\sin\theta}$

Secant: $\quad \sec\theta = \dfrac{r}{x} = \dfrac{1}{\cos\theta}$

Find the value of each expression with a calculator.

1. $\sec(-11°)$ 2. $\csc 233°$ 3. $\tan 3$ 4. $\cot 7.28$

Find the values of the other five trig functions.

5. $\cos\theta = \dfrac{4}{5}, -\dfrac{\pi}{2} < \theta < 0$

6. $\cot\theta = -\dfrac{12}{5}, 0 < \theta < \pi$

7. $\csc\theta = -5, \dfrac{\pi}{2} < \pi < \dfrac{3\pi}{2}$