**Trigonometric Functions – Review Practice Worksheet**

1. Determine the angle θ or length of side x in each triangle.

**9 cm**

a) b) c)

**30o**

 **50o**

**θ**

**8 cm**

**12 cm**

**x**

**5 cm**

**x**

**7 cm**

**40o**

1. Determine two possible lengths for the side marked x.

**x**

**6 cm**

**8 cm**

**40o**

1. Determine the coordinates of the point P on the unit circle with the following angles in standard position.

a) θ = 135o b) θ = 150o

1. Determine if the following trigonometric ratios will be positive or negative.

a) sin(200o) b) cos(285o) c) tan(160o) d) cos(60o)

1. Solve each trigonometric equation for θ; $0^{o}\leq θ\leq 360^{0}$.

a) tanθ = 1.8 b) sinθ = $-$0.5

c) secθ = 3 d) $8cos^{2}θ-2cosθ=1 $

1. Determine sinθ, cosθ, and tanθ for the terminal arm that extends from the origin to the point (-9, -12). Does the sign for each answer support the CAST rule?
2. Determine the exact value for each trigonometric expression.

a) tan(45o) b) sin(300o) c) cos(240o)

1. Prove the following statement using trigonometric identities.

$$tan^{2}θ-\frac{1}{cos^{2}θ}=-1$$

1. Determine two coterminal angles for each angle in standard position.

a) 220o b) 60o

Extra Practice: pg 338 # 1ac, 2ac, 3ac, 4ac, 5, 6, 7ac, 9, 10a, 11, 12