Integrated Math 3 Name: _____
Unit 4: Representing Functions
4.7 Worksheet Date:_____ Period:_____

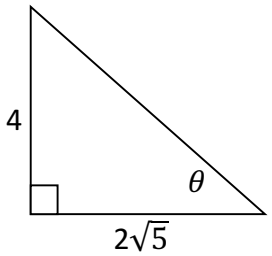
Unit 4 Quiz Review

1. State each of the trigonometric functions given the triangles below. Your answer must be rationalized and simplified.

A.) $\sin\theta =$ $\csc\theta =$

$\cos\theta =$ $\sec\theta =$

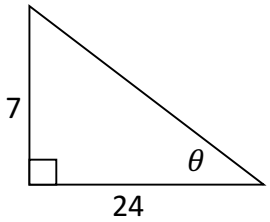
$\tan\theta =$ $\cot\theta =$



B.) $\sin\theta =$ $\csc\theta =$

$\cos\theta =$ $\sec\theta =$

$\tan\theta =$ $\cot\theta =$



2. If $\tan\theta = \frac{3}{4}$, find the values of the five remaining trigonometric functions for θ. **Show the triangle used.**

$\sin\theta =$ $\csc\theta =$ $\cos\theta =$

$\sec\theta =$ $\cot\theta =$

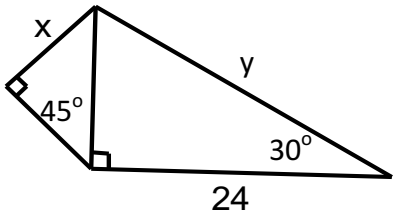
3. For each of the following angles, fill in the missing information.

Angle in Degrees	Quadrant the terminal side lies in	Co-terminal positive angle in degrees	Co-terminal negative angle in degrees	Angle in radians	Co-terminal negative angle in radians	Co-terminal positive angle in radians
324°						
				$\frac{9\pi}{4}$		

4. Determine the measure of θ **in degrees** for each of the following equations. Round to the nearest whole number degree.

A.) $\sin\theta = 0.839$ B.) $\cos\theta = -0.544$ C.) $\tan\theta = 9.514$

5. Solve for x and y.



6. When I was younger, I remember my grandpa wearing a straw hat every time he came over. When I stood 8 feet away from my grandpa, the angle of elevation to his hat was 36˚. How tall was my grandpa?

A.) Given the following situation, draw a picture.

B.) Use your height to (at the age of 8) to solve for all missing angles and sides of the triangle.

7. A seagull notices prey swimming in the ocean below. If the seagull is 50 feet above the ocean and the angle of depression from the seagull to its prey is 50˚, how far would the seagull need to fly to go directly to its prey?

8. Given the following angles, determine:

A.) 253°

i.) Find the measure (in degrees) of a positive coterminal angle of 253°.

ii.) Find the measure (in degrees) of a negative coterminal angle of 253°.

iii.) Find the quadrant that the terminal side lies in.

iv.) Find the measure (in degrees) of a reference angle of 253°.

B.) $-\frac{4\pi}{5}$

i.) Find x such that $x\pi$ is a positive coterminal angle of $-\frac{4\pi}{5}$. Represent x as a reduced fraction.

ii.) Find x such that $x\pi$ is a negative coterminal angle of $-\frac{4\pi}{5}$. Represent x as a reduced fraction.

iii.) Find the quadrant that the terminal side lies in.

iv.) Find the reference angle of $-\frac{4\pi}{5}$.