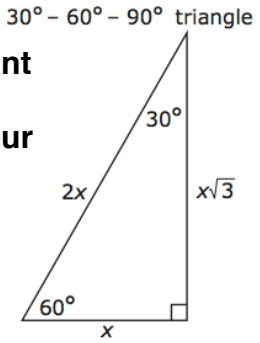
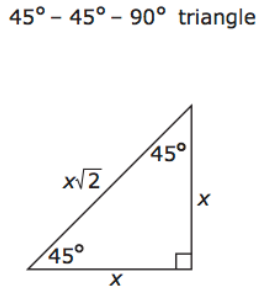
NAME:_____ **DATE: 08/04/16**

ASSIGNMENT: Unit Circle
DIRECTIONS: Utilizing your new knowledge about the unit circle, find the exact measurements for the following problems. Note: "Exact" means simplified radicals with no decimals. If you need extra help, there is a completed unit circle and tutorial video on my website.

Step 1: Sketch an x and y-axis
Step 2: Draw the triangle in the correct quadrant
Step 3: The hypotenuse is always 1
Step 4: Complete the other two sides using your knowledge of special right triangles.
Step 5: Sine is the "y" coordinate
Step 6: Cosine is the "x" coordinate
Step 7: Tangent is sine divided by cosine





1.) Find the sine, cosine, and tangent for $\frac{\pi}{3}$

SINE	**1a.) A: √3/2**	**B: 1/2**	**C: –√3/2**	**D: –1/2**	**E: –√3**
COSINE	**1b.) A: √3/2**	**B: 1/2**	**C: –√3/2**	**D: –1/2**	**E: –√3**
TANGENT	**1c.) A: √3/2**	**B: 1/2**	**C: –√3/2**	**D: –1/2**	**E: –√3**

2.) Find the sine, cosine, and tangent for $\frac{5\pi}{6}$

SINE	**2a.) A: √3/2**	**B: 1/2**	**C: –√3/2**	**D: –1/2**	**E: √3**
COSINE	**2b.) A: √3/2**	**B: 1/2**	**C: –√3/2**	**D: –1/2**	**E: √3**
TANGENT	**2c.) A: √3/2**	**B: 1/2**	**C: –√3/3**	**D: √3/3**	**E: √3**

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3.) Find the sine, cosine, and tangent for 300°

SINE	**3a.) A: √3/2**	**B: 1/2**	**C: –√3/2**	**D: –1/2**	**E: –√3**
COSINE	**3b.) A: √3/2**	**B: 1/2**	**C: –√3/2**	**D: –1/2**	**E: –√3**
TANGENT	**3c.) A: √3/2**	**B: 1/2**	**C: –√3/2**	**D: –1/2**	**E: –√3**

4.) Find the sine, cosine, and tangent for 225°

SINE	**4a.) A: √2/2**	**B: –√2/2**	**C: –√3/2**	**D: –1**	**E: 1**
COSINE	**4b.) A: √2/2**	**B: –√2/2**	**C: –√3/2**	**D: –1**	**E: 1**
TANGENT	**4c.) A: √2/2**	**B: –√2/2**	**C: –√3/2**	**D: –1**	**E: 1**

5.) Find the coordinates for the unit circle at each degree or radian measurement.

270°	**5a.) A: (0, 1)**	**B: (1, 0)**	**C: (0, –1)**	**D: (–1, 0)**
$\frac{5\pi}{3}$	**5b.) A: (1/2, √3/2)**	**B: (1/2, –√3/2)**	**C: (√3/2, –1/2)**	**D: (√3/2, 1/2)**
$\frac{7\pi}{4}$	**5c.) A: (√2/2, √2/2)**	**B: (–√2/2, √2/2)**	**C: (√2/2, –√2/2)**	**D: (1, –1)**