Algebra/Trigonometry **Name:** _____

Review for Chapter 6 Test (Due Tues)
Show all work for credit. 6 Points.

YOU MAY USE YOUR PINK SHEET FOR YOUR REVIEW AND FOR THE QUIZ

1. Find the reference angle for the following:

a. $225°$ **b.** $330°$ **c.** $-45°$ **d.** $5\pi/3$ **e.** $-7\pi/4$

_____ _____ _____ _____ _____

2. Determine the quadrant of the above angles.

a. _____ **b.** _____ **c.** _____ **d.** _____ **e.** _____

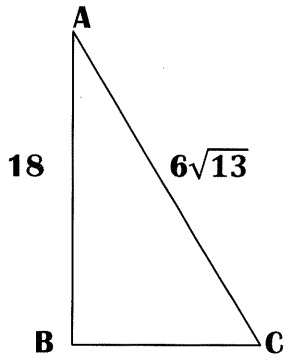
3. Convert the following degrees to radians:

a. $260° =$ _____ **b.** $480° =$ _____ **c.** $-100° =$ _____

4. Convert the following radians to degrees:

a. $5\pi/9 =$ _____ **b.** $-4\pi/5 =$ _____ **c.** $7\pi/6 =$ _____

5. Use Pythagorean theorem and SOHCAHTOA to find the values of all 6 trig functions:



Sin A = _____ **Csc A =** _____

Cos A = _____ **Sec A =** _____

Tan A = _____ **Cot A =** _____

6. Given the following situation, find the values of all 6 trig functions:

a. $\sin\theta = 4/5$ **and** $90° \leq \theta \leq 180°$

Quadrant: _____

Sin θ = _____

Cos θ = _____

Tan θ = _____

Csc θ = _____

Sec θ = _____

Cot θ = _____

b. $\tan\theta = -5/17$ **and** $3\pi/2 \leq \theta \leq 2\pi$

Quadrant: _____

Sin θ = _____

Cos θ = _____

Tan θ = _____

Csc θ = _____

Sec θ = _____

Cot θ = _____

7. Use your PINK sheet to determine the value of the following angles.

Find the reference angle (α) and determine the Quadrant first!

a. $\sin 135°$ = _____

b. $\cos(-210°)$ = _____

c. $\tan 5\pi/6$ = _____

d. $\sin \pi/2$ = _____

e. $\cos 315°$ = _____

f. $\cos(-45°)$ = _____

g. $\cos \pi$ = _____

h. $\sin(-270°)$ = _____

i. $\tan 11\pi/6$ = _____

j. $\cos(-150°)$ = _____

K. $\tan(-330°)$ = _____

L. $\tan 3\pi/2$ = _____

m. $\sin 150°$ = _____

n. $\cos(-2\pi/3)$ = _____

o. $\sin(-135°)$ = _____

p. $\tan 180°$ = _____

8. Solve the trig equations below for $0 \leq \theta \leq 360°$.

a. $\sin\theta = \frac{\sqrt{3}}{2}$ **b.** $\cos\theta = -1$ **c.** $2\tan\theta = -2$

9. Solve the trig equations below for $0 \leq \theta \leq 2\pi$.

a. $\sin\theta = -\frac{\sqrt{2}}{2}$ **b.** $2\cos\theta = -1$ **c.** $3\tan\theta = -\sqrt{3}$

10. A point (-8, -15) is on the terminal side of an angle in standard position. Determine exact values of the six trigonometric functions of the angle.

Sin θ = _____ **Csc** θ = _____

Cos θ = _____ **Sec** θ = _____

Tan θ = _____ **Cot** θ = _____