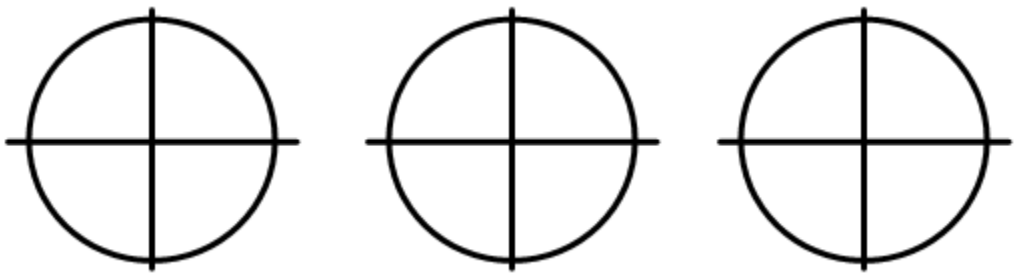
MAT 122 Homework 1 *and* Quiz 1 Name_____
January 27, 2012 1.1 – 1.2

Show all work. You may collaborate on this first homework/quiz. Henceforth, Quizzes will be in-class and on your own (and shorter). Homework will be accessed thru the website.

1. Sketch each angle in standard position (2 per sketch):

a. $\frac{\pi}{3}, -\frac{5\pi}{6}$ b. $\frac{\pi}{4}, -\frac{3\pi}{2}$ c. $\frac{2\pi}{3}, -\frac{3\pi}{4}$



2. Convert each of the angles, above into degrees:

a. $\frac{\pi}{3}, -\frac{5\pi}{6}$ b. $\frac{\pi}{4}, -\frac{3\pi}{2}$ c. $\frac{2\pi}{3}, -\frac{3\pi}{4}$

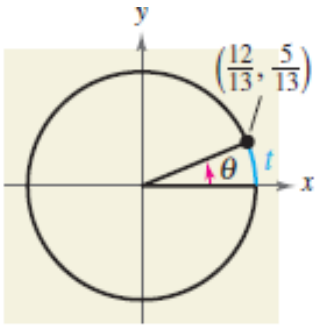
3. Determine two angles that are coterminal with $\frac{2\pi}{3}$, one positive and one negative.

4. Convert the angle to radians:

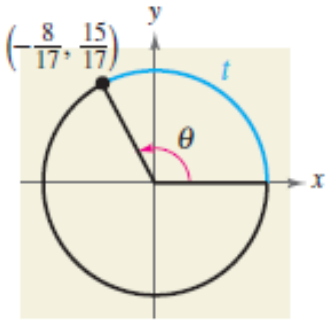
a. 45^0 b. -48.27^0 c. $85^0 18' 30''$

5. Determine the value of the 6 trig functions:

a.



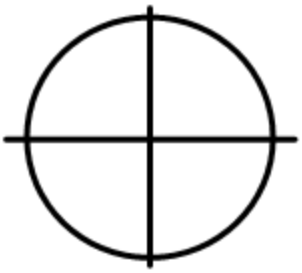
b.



$\sin t$ $\csc t$ $\sin t$ $\csc t$

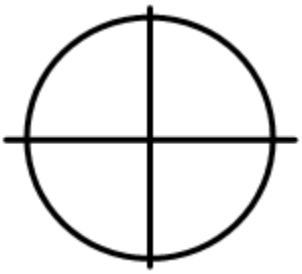
$\cos t$ $\sec t$ $\cos t$ $\sec t$

$\tan t$ $\cot t$ $\tan t$ $\cot t$



6. Find the point (as an ordered pair) on the unit circle that corresponds to $t = \frac{5\pi}{3}$.

7. Evaluate (if possible), the six trigonometric functions of $t = -\frac{3\pi}{2}$



$\sin t$ $\csc t$

$\cos t$ $\sec t$

$\tan t$ $\cot t$

8. If $\sin(t) = \frac{\sqrt{5}}{7}$, what is $\sin(-t)$? What is $\cos(t)$? What is $\cos(-t)$?