Pre-Calc Academic Name_____

STUDY GUIDE (SECTION 4.7)

Date_____ Period____

Solve each equation for $0 \le \theta < 4\pi$. Put answer in degrees and radians

1) $\sec\theta = -\sqrt{2}$

2) $0 = \cot\theta$

3) $\frac{1}{2} = \sin\theta$

4) $\cot\theta = -\frac{\sqrt{3}}{3}$

5) $\cos\theta = -\frac{\sqrt{2}}{2}$

6) $\csc\theta = -2$

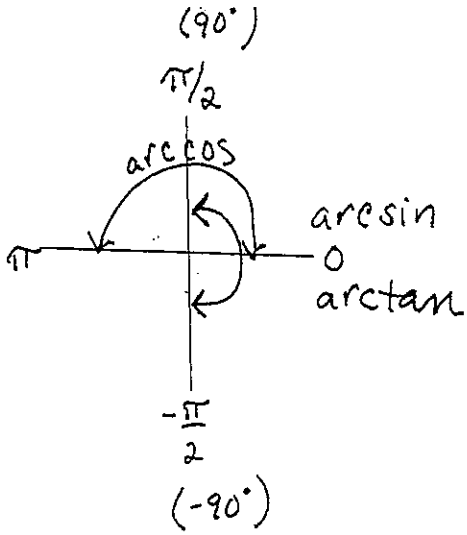
7) $\sec\theta = \sqrt{2}$

8) $-2 = \sec\theta$

9) $-\frac{1}{2} = \sin\theta$

10) $0 = \sin\theta$

Evaluate the following without a calculator:



$\arcsin(\sqrt{3}/2) =$

$\arcsin(-1) =$

$\arccos(0) =$

$\arccos(\sqrt{2}/2) =$

$\arctan(0) =$

$\arctan(-1) =$

$\arcsin(\sqrt{3}) =$

$\arctan(1) =$

$\arccos(-\sqrt{2}/2) =$

$\arctan(-\sqrt{3}/3) =$

$\arccos(-1/2) =$

$\arctan(\sqrt{3}) =$

Evaluate each without a calculator:

$\cos(\arcsin(-1)) =$

$\tan(\arccos(-\frac{1}{2})) =$

$\sin(\arctan(-\frac{\sqrt{3}}{3})) =$

$\arctan(\tan\frac{5\pi}{6}) =$

$\arccos(\sin\frac{4\pi}{3}) =$

$\arcsin(\cos\frac{7\pi}{6}) =$

Evaluate each of the following. Sketch a triangle in the appropriate quadrant.

$\cos(\arcsin\frac{5}{13}) =$

$\sec(\arctan\frac{-3}{5}) =$

$\tan(\arcsin\frac{-5}{6}) =$

$\csc(\arccos\frac{-2}{3}) =$

$\cot(\arccos x) =$

$\cos(\arcsin 2x) =$

$\tan(\arccos\frac{1}{3x}) =$