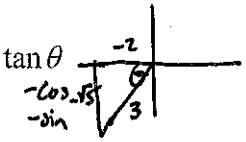
GSE PreCalculus: Graphing Trig Functions
Test 4 Review

Name_____
Date_____Period_____

Review from Test 1-Test 3:

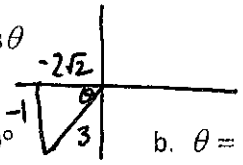
1. Identify the following conic: $x^2+(y-1)^2=4$
2. Identify the following conic: $\frac{(x-1)^2}{4}-\frac{(y+2)^2}{25}=1$
3. Multiply the following matrices: $\begin{bmatrix} a & -2 \\ z & 3 \end{bmatrix}\cdot\begin{bmatrix} 2 & 4 \\ -1 & 7 \end{bmatrix}$
4. Solve the linear system: $\begin{aligned} 2x+4y&=-2 \\ 5x+2y&=7 \end{aligned}$
5. Find a positive co-terminal angle for: a. $\theta=-\frac{3\pi}{7}$ b. $\theta=\frac{2\pi}{5}$
6. Given $\cos\theta=-\frac{2}{3}$ and $\sin\theta<0$, find $\tan\theta$



$(-2)^2+b^2=(3)^2$
$4+b^2=9$
$b^2=5$
$b=\sqrt{5}$

$\tan\theta=\frac{-\sqrt{5}}{-2}=\frac{\sqrt{5}}{2}$

7. Given $\sin\theta=-\frac{1}{3}$ and $\cos\theta<0$, find $\cos\theta$



$(-1)^2+b^2=3^2$
$1+b^2=9$
$b^2=8$
$b=2\sqrt{2}$

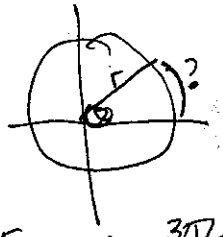
$\cos\theta=\frac{-2\sqrt{2}}{3}$

8. Find the reference angle for: a. $\theta=240°$ b. $\theta=315°$
9. Find the exact value of the following functions:

a. $\cos\left(-\frac{5\pi}{6}\right)$ b. $\sin 240^\circ$ c $\sec\frac{7\pi}{3}$ d. $\tan 480^\circ$

e. $\csc(-330^\circ)$ f. $\cot 150^\circ$ g. $\cos\frac{\pi}{6}$

Extra Problem!
Find the measure of the arc



formula
$\theta r=arc$
θ must be in radians

Ex: $\theta=3\pi/5$ $r=15cm$