

Name \_\_\_\_\_

Date \_\_\_\_\_ Period \_\_\_\_\_

**Precalculus Review Worksheet #3**  
**Trigonometric Functions**  
**No calculators may be used on this worksheet.**

1) Evaluate each by first drawing a diagram on the coordinate plane.

a)  $\sin \frac{3\pi}{2}$

b)  $\tan^{-2\pi/3}$

c)  $\csc \frac{5\pi}{4}$

d)  $\cos^{-7\pi/6}$

e)  $\sec(-\pi)$

f)  $\cot 0$

g)  $\csc \frac{11\pi}{6}$

h)  $\tan^{-\pi/3}$

i)  $\sec \frac{5\pi}{3}$

j)  $\cos^{-7\pi/4}$

k)  $\arcsin\left(-\frac{\sqrt{2}}{2}\right)$

l)  $\arctan 1$

m)  $\arccos \frac{1}{2}$

2) Graph each from memory without using a t-chart. Include x-intercepts, minimum and maximum values, and asymptotes.

a)  $f(x) = \sin x$

b)  $f(x) = \cos x$

c)  $f(x) = \tan x$

d)  $f(x) = \csc x$

e)  $f(x) = \sec x$

f)  $f(x) = \cot x$

3) Use the trigonometric identities to give the simplest equivalent of each.

a)  $1 - \cos^2 x =$

b)  $\tan^2 x =$

c)  $\sin x \cos x =$

d)  $\csc^2 x - 1 =$

e)  $\frac{\tan x}{\sin x} =$

