

Group Work 1.1-1.2
PCHA 2022-23 / Dr. Kessner

Name:

Partner(s):

You can use any class materials and discuss with your classmates, but no calculator and no other online resources.

1. Draw a unit circle and evaluate the following:

a) $\sin \frac{5\pi}{3}$

b) $\cos \frac{7\pi}{6}$

c) $\csc \frac{5\pi}{6}$

d) $\sec \frac{7\pi}{6}$

e) $\tan \frac{3\pi}{4}$

f) $\cot \frac{5\pi}{4}$

g) $\tan \frac{15\pi}{4}$

h) $\cot \frac{15\pi}{4}$

i) $\sin \frac{99\pi}{2}$

j) $\sin \frac{97\pi}{2}$

3. List the transformations required to obtain the function from a standard trig function. Write down the period and amplitude (if applicable). Graph the function. What are the domain and range?

a. $f(x) = -3 \cos\left(\frac{1}{2}(x - \pi)\right) + 3$

b. $g(x) = 3 \cot\left(\frac{x}{3}\right) - 3$