

M505G -Additional Homework Problems, Due: March 21. Please write on a piece of paper and hand in with rest of your homework.

1. Draw the “unit circle” from class, including an angle  $\theta$ . Also label its point of intersection with the unit circle, and  $\cos \theta$  and  $\sin \theta$ .

2. Find the exact value of these trigonometric functions:

a)  $\sin(3\pi)$

b)  $\cos(-\frac{\pi}{4})$

c)  $\cos(\frac{5\pi}{2})$

d)  $\sin(\frac{17\pi}{4})$

e)  $\cos(-37\pi)$

f)  $\cos(\frac{5\pi}{6})$

g)  $\sin(\frac{13\pi}{6})$

h)  $\cos(-\frac{\pi}{6})$

i)  $\sin(-\frac{\pi}{3})$

3. A point on the terminal side of an angle  $\theta$  in standard position is given. Find the exact values of  $\sin(\theta)$  and  $\cos(\theta)$ .

a)  $(5, -12)$

b)  $(2, 2)$