ACMAT118 Spring 2024 Professor Manguba-Glover Section 6.6 Classwork (CW 7)

Name: \_\_\_\_\_

Complete as many of the following problems as you can with your table. You do not have to go in order. If **your entire table** finishes early, and your answers have been checked, you may leave early.

- 1. Find the exact value:
  - (a)  $\cos^{-1}\left(-\frac{\sqrt{2}}{2}\right)$  (c)  $\tan^{-1}(-\sqrt{3})$ (b)  $\sin^{-1}\left(-\frac{1}{2}\right)$  (d)  $\sin(\tan^{-1}(-1))$

2. (a) 
$$\sin^{-1}\left(\sin\left(-\frac{4\pi}{7}\right)\right)$$
 (c)  $\tan\left(\sin^{-1}\left(\frac{4}{7}\right)\right)$   
(b)  $\cos^{-1}\left(\cos\left(-\frac{4\pi}{7}\right)\right)$  (d)  $\sin\left(\cos^{-1}\left(\frac{1}{3}\right)\right)$ 

Key:

1. (a) 
$$\frac{3\pi}{4}$$
 (c)  $-\frac{\pi}{3}$  2. (a)  $-\frac{3\pi}{7}$  (c)  $\frac{4}{\sqrt{33}}$   
(b)  $-\frac{\pi}{6}$  (d)  $-\frac{\sqrt{2}}{2}$  (b)  $\frac{4\pi}{7}$  (d)  $\frac{2\sqrt{2}}{3}$