

Math 104 Practice Test 2

1. Find the exact value:

a.  $\sec \frac{17\pi}{4}$

b.  $\tan \frac{19\pi}{6}$

c.  $\sin\left(-\frac{\pi}{2}\right)$

2. Find the values of the remaining trigonometric functions of  $\theta$  if  $\sin\theta = -2/3$ , and  $\theta$  is in quadrant 3.

3. Find the exact value of  $\sin\left(-\frac{\pi}{12}\right)\csc\left(\frac{25\pi}{12}\right)$ .

4. Graph:

a.  $y = 3\cos(2x)$

b.  $y = -2\sin(\pi x) + 3$

c.  $y = \tan\left(\frac{1}{2}x\right)$

d.  $y = -3\sec\left(\frac{\pi}{2}x\right)$

e.  $y = \cos\left(2x - \frac{\pi}{2}\right)$

5. Find the exact value:

a.  $\tan^{-1}(\sqrt{3})$

b.  $\cos^{-1}\left(-\frac{\sqrt{3}}{2}\right)$

c.  $\sin^{-1}\left(\sin\frac{9\pi}{8}\right)$

d.  $\cos\left(\cos^{-1}\left(\frac{2}{3}\right)\right)$

e.  $\cot\left(\sin^{-1}\left(-\frac{1}{2}\right)\right)$

f.  $\csc\left(\tan^{-1}\left(\frac{1}{2}\right)\right)$