

1. Without finding  $\theta$  find the exact value of the other 5 trig functions for the angle  $\theta$ .

(a)  $\sin(\theta) = \frac{3}{5}$ ;  $\theta$  in the first quadrant.

(b)  $\cos(\theta) = -\frac{1}{\sqrt{2}}$ ;  $\theta$  in the second quadrant.

2. Find the exact value (not a decimal approximation) for the following:

(a)  $\sec\left(\frac{\pi}{6}\right)$

(b)  $\sin\left(-\frac{\pi}{4}\right)$

(c)  $\tan\left(-\frac{3\pi}{4}\right)$

(d)  $\cot\left(\frac{11\pi}{6}\right)$

(e)  $\cos\left(\frac{19\pi}{6}\right)$

(f)  $\csc\left(\frac{4\pi}{3}\right)$

3. Express each of the following in terms of functions of a positive acute angle (same as Problems 6.12).

(a)  $\sin\left(\frac{2\pi}{3}\right)$

(b)  $\cos\left(\frac{11\pi}{6}\right)$

(c)  $\tan\left(\frac{16\pi}{3}\right)$

(d)  $\sin\left(\frac{8\pi}{7}\right)$

4. Use your calculator to find

(a)  $\sin\left(\frac{3\pi}{2}\right)$

(b)  $\cot\left(\frac{5\pi}{8}\right)$

(c)  $\sec\left(\frac{11\pi}{5}\right)$