

1. Without finding θ find the exact value of the other 5 trig functions for the angle θ .

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

(b) $\cos(\theta) = -\frac{1}{\sqrt{2}}$; θ 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) $\sec\left(\frac{11\pi}{5}\right)$