Additional Problems Assignment 5

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. Express each of the following in terms of reference angles. For example $\cos(\frac{-3\pi}{4}) = -\cos(\frac{\pi}{4})$.
   (a) $\sin(150^\circ)$
   (b) $\cos(\frac{11\pi}{6})$
   (c) $\tan(\frac{16\pi}{3})$
   (d) $\sin(\frac{8\pi}{7})$

3. Find the exact value (not a decimal approximation) for the following:
   (a) $\sin(150^\circ)$
   (b) $\tan(-60^\circ)$
   (c) $\cos(-480^\circ)$
   (d) $\sec(300^\circ)$
   (e) $\sec\left(\frac{\pi}{6}\right)$
   (f) $\sin\left(-\frac{\pi}{4}\right)$
   (g) $\tan\left(-\frac{3\pi}{4}\right)$
   (h) $\cot\left(\frac{11\pi}{6}\right)$
   (i) $\cos\left(\frac{19\pi}{6}\right)$
   (j) $\csc\left(\frac{4\pi}{3}\right)$

4. Find all angles $0^\circ \leq \theta \leq 360^\circ$ (in degrees) such that:
   (a) $\sin(\theta) = \frac{\sqrt{2}}{2}$
   (b) $\sec(\theta) = -\sqrt{2}$

5. Find all angles $0 \leq \theta \leq 2\pi$ (in radians) such that:
   (a) $\tan(\theta) = \frac{\sqrt{3}}{3}$
   (b) $\csc(\theta) = -2$

6. Use your calculator to find
   (a) $\sin(\frac{3\pi}{2})$
   (b) $\cot(\frac{5\pi}{8})$
   (c) $\sec(\frac{11\pi}{5})$