Math 141 - Trigonometry Homework Due Friday, Sept. 4th

1. Convert the following angles from degrees to radians.

$$(a)\ 300^\circ \quad (b)\ -210^\circ \quad (c)\ 900^\circ$$

2. Convert from radians to degrees.

$$(a)\ 4\pi \quad (b)\ 2 \text{ radians} \quad (c)\ -\frac{3\pi}{4}$$

3. Find the exact values of $\sin\theta$, $\cos\theta$ and $\tan\theta$ when $\theta = \frac{3\pi}{4}$.

4. Find all solutions of the equation $\sin x = \tan x$.

5. Find all solutions of the equation $|\tan x| = 1$ in the interval $[0, \pi)$.

6. Find all x values on the interval $[0, 2\pi]$ such that $\sin x > \cos x$.