Florida International University                Spring 2018
Trigonometry-MAC1114                           Due Date: 3/9/2018
Pre-Class Assignment 9

Name: _____

**SHOW ALL YOUR WORK FOR EACH PROBLEM TO GET FULL CREDIT.**
**PLEASE BE NEAT.**

**Direction:** Read through sections 6.5 in your book and answer the following questions.

1.      Solve the following equations

   a) $2x+5 = 1$

   b) $3x\text{-}5 = 5 - 2x$

   c) $x^2 - 5x + 6 = 0$

   d) $3x^2 + x - 2 = 0$

   e) $2x^2 - 5x - 3 = 0$

2.      a.      For which angle(s) the sine function takes values $\frac{1}{2}$.

        b.      For which angle(s) the cosine function takes values $\sqrt{3}/2$.

3.     What are the periods of sine, cosine and tangent functions (Section 5.4).

4.     In the following equation, we can NOT divide both sides of the equation by $\tan(x)$. What do you think the reason for that is?

$$\tan(x) \cdot \cot(x) = \tan(x)$$

5.     Solve the equation on the interval $0 \leq \theta < 2\pi$. (Section 6.5)

$$2\sin\theta + 3 = 2$$