Florida International University
Trigonometry-MAC1114
Pre-Class Assignment 8

Spring 2018
Due Date: 3/2/2018

Name: $\qquad$

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

Direction: Read through sections 6.3 and 6.4 in your book and answer the following questions.

1. a. Write the double angle formulas for sine and cosine functions. (Section 6.3)
b. Give an example to show why $\sin (2 \theta)=2 \sin (\theta)$ is not true.
2. Derive the identity $\cos (2 \theta)=2 \cos ^{2}(\theta)-1$ from $\cos (2 \theta)=\cos ^{2}(\theta)-\sin ^{2}(\theta)$ by using Pythagorean Identity.(Section 6.3)
3. Use the figure to find the exact value of the trigonometric function $\cos 2 \theta$. (Section 6.3)

