# Math 1060 Homework 3 

Due: September 16th, 2014

## Problem 1

Staple your homework and write your name on it.

## Problem 2

a Plot $y=-3 \sin (2 x)$ for $x$ values between $-2 \pi$ and $2 \pi$. Draw the coordinate axes and draw tick marks on the $x$ axis every increment of $\pi / 2$, i.e. at $-2 \pi,-3 \pi / 2$, etc.
b What is the amplitude of this function?
c What is the period of this function?

## Problem 3

a Plot $y=\cos \left(\frac{1}{2}(x-\pi)\right)+1$ for $x$ values between $-2 \pi$ and $2 \pi$. Draw the coordinate axes and draw tick marks on the $x$ axis every increment of $\pi / 2$, i.e. at $-2 \pi,-3 \pi / 2$, etc.
b What is the vertical shift of this function?
c What is the period of this function?

## Problem 4

a Plot $\tan (2 x)$ for $x$ values between $-\pi$ and $\pi$. Draw the coordinate axes and draw tick marks on the $x$ axis every increment of $\pi / 4$.
b Plot $\cot (2 x)$ for $x$ values between $-\pi$ and $\pi$. Draw the coordinate axes and draw tick marks on the $x$ axis every increment of $\pi / 4$.

## Problem 5

a Plot $3 \sec (x)$ for $x$ values between $-2 \pi$ and $2 \pi$. Draw the coordinate axes and draw tick marks on the $x$ axis every increment of $\pi / 2$.
b Plot $\csc (x-\pi)$ for $x$ values between $-\pi$ and $\pi$. Draw the coordinate axes and draw tick marks on the $x$ axis every increment of $\pi / 2$.
c What's the period of $\csc (3 x)$ ?

