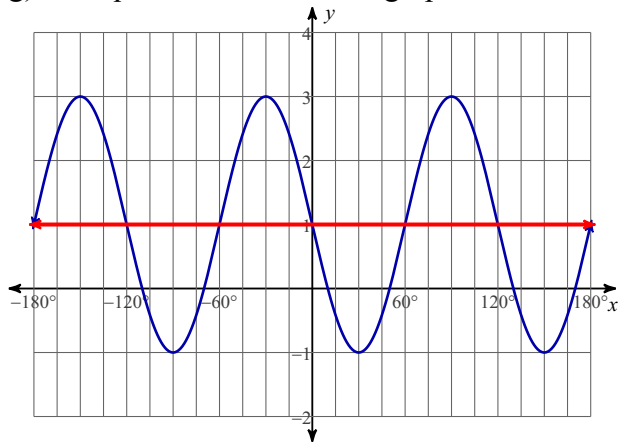
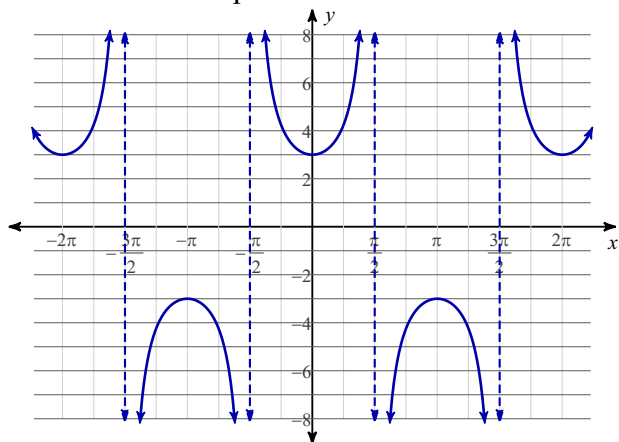


Math-1060 HW #15 (Chapter 5 Test Preview Part 1)

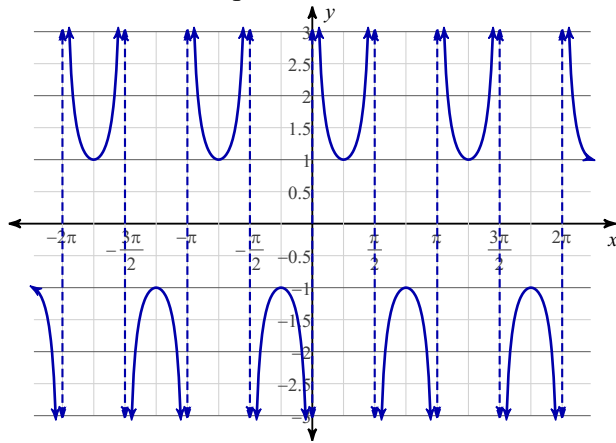
- 1) For the sine function graphed below (assume there is no x-axis reflection) determine the:
- Amplitude
 - Center line:
 - Frequency
 - Period
 - phase shift
 - up/down shift
 - the equation that has been graphed



- 2) What is the the equation for the secant function graphed below?



3) What is the equation for the cosecant function graphed below?



Using degrees, find the amplitude, phase shift, and period.

4) $y = 4\sin(6\theta - 180)$

Using radians, find the amplitude, phase shift, and period.

5) $y = -3\cos\left(\frac{\theta}{4} + \frac{\pi}{6}\right)$

6) What is the domain (in radians) of the cotangent function: $y = \cot \theta$?

7) a) What is the mathematical definition of an even function?

b) Circle the even functions in the group below:

$\sin \theta$ $\cos \theta$ $\tan \theta$ $\sec \theta$ $\csc \theta$ $\cot \theta$

8) What is the domain of validity for the following equation?

$$4x = \frac{4x^2 - 8x}{x - 2}$$