Pre-Calculus Warm-up

#### Week 1

#### August 3, 2016

- 1. 12x + 7(x 10) = 9(x 8) 5
- 2. 2x + 6(x-10) = 5x + 4(x-2)
- 3.  $5\frac{4}{5} + 4\frac{2}{7}$
- 4.  $5\frac{4}{5} \div \frac{2}{47}$
- 5. Factor, a.  $x^2 + 21x + 20$ , b.  $10x^2 40$ , c.  $5x^2 50$

### Week 2

# August 9, 2016

- Cos X = 3/7

   Write all 6 Trig functions
- The angle of elevation of a ladder is 48 degrees. The Ladder is 15 ft long. How high is the placement of the Top of the ladder against a building?

# August 11, 2016

- 1. Find  $\csc \theta$ , if  $\tan \theta = \frac{5}{7}$
- 2. Write out your own trig word problem and solve it.

Any situation that you can use trig to find the missing length.

3. Write out the unit circle 3 times by hand.

### Week 3

August 15, 2016

- 1.  $5\cos\frac{\pi}{3} + 4\sin\frac{\pi}{6}$
- 2.  $2tan_{\frac{\pi}{3}} + 4cos_{\frac{\pi}{6}}$
- 3.  $-4\cos\frac{2\pi}{3} + 8\tan\frac{11\pi}{6}$
- 4. 5(x-8)=2(x+4)

August 17, 2016

- 1. Find  $\csc \theta$ , if  $\tan \theta = \frac{8}{9}$
- 2.  $-5\cos\frac{5\pi}{6} + 8\tan\frac{2\pi}{3}$
- 3.  $12x^2 + 3x + 50 = 10$

# Week 4

August 26, 2016

- 1. Graph y=-4sin(x) + 9
- 2. Draw the Radian measures only on the unit circle.
- 3.  $-4\tan\frac{\pi}{3} + 10\cos\frac{\pi}{6}$

#### Week 5

September 1, 2016

- 1. Graph  $y = -9\cos(4x \pi) + 5$
- 2. Graph y =  $10\sin(\frac{x}{5} + \pi) 4$
- **3.** Find sec  $\theta$ , if  $tan\theta = \frac{5}{9}$

#### Week 7

### September 12, 2016

- 1. Graph,  $y = 5 + 2\cos(3x \pi)$
- 2. Find all 6 trig functions if  $\csc x = 10$

3. Given Information from the boat problem.

Low tide = 8, Average = 12, Period = 6hrs and 30 mins. sketch the graph and write the equation.

- September 13, 2016
  - 1. A = 45, B = 32, b = 10, find a
  - 2. solve for x,
    - a. sin x = -.5 (Exact Value)
    - b. sin x = .5 (exact value)
    - c. cos x = -.5 (exact value)
    - d. cos x = .5 (exact value)
  - 3. Solve for x,
    - a. sin 2x = -.5
    - b.  $\sin 2x = .5$

### Week 8

September 27, 2016

All possible solutions

- 1. sin x = -.5
- 2. cos x = .5
- 3. tan x = 1
- 4.  $\sin 2x = -.5$
- 5.  $\cos 2x = .5$
- 6. tan 2x = 1

# Week 10

October 11, 2016

- 1.  $12\cos\frac{\pi}{3} + 6\sin\frac{\pi}{6}$
- 2. Graph  $y = -4\cos(5x) + 10$
- 3.  $-8\cos\frac{2\pi}{3} + 10\tan\frac{11\pi}{6}$
- 4. 5(x-8)=10(x+4)

# October 13, 2016

## Solve the triangle

- 1. m<A = 68, a = 50, b = 40,
- 2. Find all 6 trig functions if sec x = 5

# Week 13

### Solve the triangle and find the area

- 1. c = 88, a = 60, b = 50,
- 2. Solve for x.  $\sin 2x = .5$

### Week 16

# November 28, 2016

- **1.** Find  $\csc \theta$ , if  $\tan \theta = \frac{5}{9}$
- 2. Write out the unit circle 3 times by hand (Everything).

### 3. 4(x + 12) = 5(x-8)

4. Solve the triangle (Round to 4 decimals)

m<A = 68, a = 60, b = 50,

- 5. Solve:  $12\cos\frac{\pi}{3} + 6\sin\frac{\pi}{6}$
- 6. Graph  $y = -4\cos(5x) + 10$