Tuesday, 2/25/20

1. Sit with your assigned group

2. Complete the warm up that you picked up from the back of the room (we'll go over it in a few minutes) – white paper

3. Be the teacher activity (yellow paper will be handed in)

4. See me for additional review when your group finishes the activity – blue paper

Warm Up

JUNE 2019 Exam (Part IV = 6 points)

Griffin is riding his bike down the street in Churchville, NY at a constant speed, when a nail gets caught in one of his tires. The height of the nail above the ground, in inches, can be represented by the trigonometric function $f(t) = -13\cos(0.8\pi t) + 13$, where t represents the time (in seconds) since the nail first became caught in the tire.
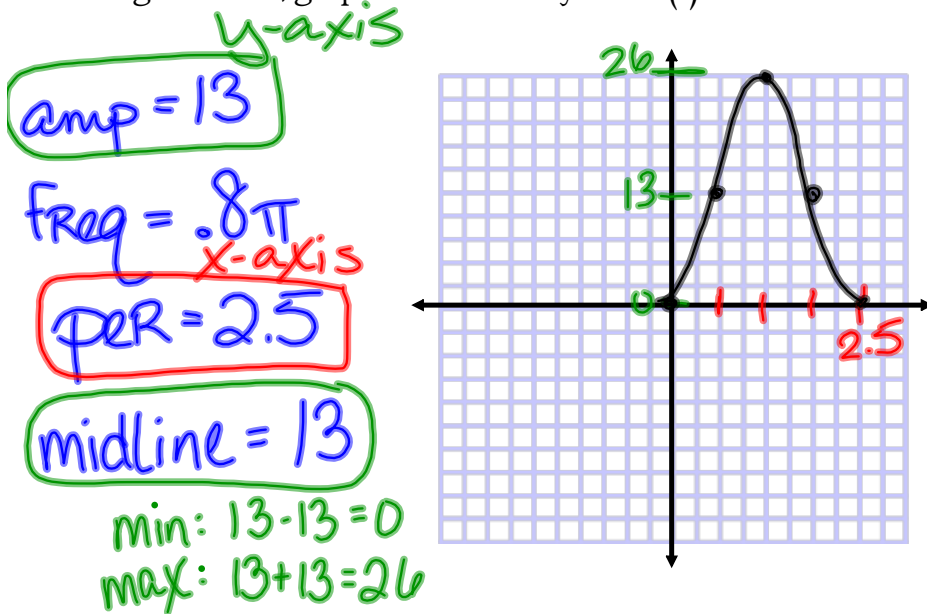
Determine the period of f(t).

$$\frac{2\pi}{freq}$$

$$\frac{2\pi}{0.8\pi} = \boxed{2.5}$$

Interpret what the period represents in this context.

How long it takes for nail to do full Rotation.

What does this word ALWAYS indicate doing?

On the grid below, graph at least one cycle of f(t) that includes the y–intercept of the function.

y-axis

amp = 13

freq = .8π

x-axis

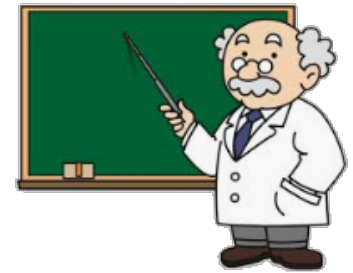PeR = 2.5

midline = 13

min: 13-13 = 0
max: 13+13 = 26

Does the height of the nail ever reach 30 inches above the ground? Justify the answer.

No, max is 26.

How could you access these points even if you didn't know anything about trig graphs?

Be The Teacher

1.   A "student" completed the following quiz

2.   Your job is to grade it (deduct 1 point for each mistake on a question)

   –   #1-4 are worth 5 points each

   –   #5-8 are worth 2 points each

   –   #9 is worth 7 points

3.   Use calculators & class notes as resources

4.   Your group will hand in ~~one~~ (yellow) graded quiz by the end of the period... make sure you agree on answers.