Week 27 Geometry DEAR Sheet for Monday.

From your downloads of wk 26 and wk 27:

A) From download sheet "**Trigonometry Definition**" Copy the following into your notebook:
   a. Right triangle definition
   b. Unit circle definition
   c. Inverse trigonometric Functions notations

B) From download sheet "**Trigonometry laws and Identities**" Copy the following into your notebook:
   a. Tangent identity
   b. Reciprocal identity
   c. Pythagorean identity
   d. Even/Odd identities
   e. Periodic identities
   f. Law of cosine
   g. Law of sines
   h. Cofunction Identity

Week 27 Geometry Take home test Due Friday 11:59 pm.

1) Use the unit circle from Sheet "**Trigonometric Definition**" to create a unit circle for tangent.
   a. Take note that: $\tan(30^o) = \frac{Sin\ (30°)}{Cos\ (30°)} = \frac{y}{x} = \frac{1}{2} \div \frac{\sqrt{3}}{2} =$_____ for the unit circle
   b. Take note that the **unit circle for tangent** does not have a point (x, y) but it has a Ratio $= \frac{y}{x} = y \div x$
   c. Leave your answers in fraction form, and rationalize the denominators. (No radicals in denominator)
2) Use an online graphing calculator to plot separately the graphs of Sin x, Cos x, Tan x for $-360^o \le x \le 360^o$. Then use a long graph sheet (Join to graph papers to create a long graph sheet)to plot your graphs. Write a summary of what you observe from the three separate graphs. Also make sure to take a picture of your online graphs to include them in your test.
3) Online calculator link: https://www.desmos.com/calculator