Graph the following. Label all positions on axis with the appropriate values and show work as necessary:

y = 3sin **

Remember:

y = A sin (k**h) + vs

y = A cos (k**h) + vs

Calculate your Period here:



 $P\_{a}= \frac{2π}{k} and h\_{s}= \frac{-h}{k}$

**

y = 2cos *x*

Remember:

y = A sin (k**h) + vs

y = A cos (k**h) + vs

Calculate your Period here:

 $P\_{a}= \frac{2π}{k} and h\_{s}= \frac{-h}{k}$

y = tan **

Remember:

y = A sin (k**h) + vs

y = A cos (k**h) + vs

Calculate your Period here:



 $P\_{a}= \frac{π}{k} and h\_{s}= \frac{-h}{k}$

**

y = cot *x*

Remember:

y = A sin (k**h) + vs

y = A cos (k**h) + vs

Calculate your Period here:

 $P\_{a}= \frac{π}{k} and h\_{s}= \frac{-h}{k}$

y = 4sec 2**

Remember:

y = A sin (k**h) + vs

y = A cos (k**h) + vs

Calculate your Period here:



 $P\_{a}= \frac{2π}{k} and h\_{s}= \frac{-h}{k}$

**

y = 2csc 4*x*

Remember:

y = A sin (k**h) + vs

y = A cos (k**h) + vs

Calculate your Period here:

 $P\_{a}= \frac{2π}{k} and h\_{s}= \frac{-h}{k}$

$$y=2\sin((2θ+\frac{π}{2}))+2$$



Remember:

y = A sin (k**h) + vs

y = A cos (k**h) + vs

Calculate your Period here:

 $P\_{a}= \frac{2π}{k} and h\_{s}= \frac{-h}{k}$

**


$$y=-3\cos((4θ-\frac{π}{3}))-2$$

Remember:

y = A sin (k**h) + vs

y = A cos (k**h) + vs

Calculate your Period here:

 $P\_{a}= \frac{2π}{k} and h\_{s}= \frac{-h}{k}$

y = sin-1 **

Remember:

y = A sin (k**h) + vs

y = A cos (k**h) + vs

Calculate your Period here:

 $P\_{a}= \frac{2π}{k} and h\_{s}= \frac{-h}{k}$

y = cos-1 *x*

Remember:

y = A sin (k**h) + vs

y = A cos (k**h) + vs

Calculate your Period here:

 $P\_{a}= \frac{2π}{k} and h\_{s}= \frac{-h}{k}$

y = tan-1 **

Remember:

y = A sin (k**h) + vs

y = A cos (k**h) + vs

Calculate your Period here:

 $P\_{a}= \frac{π}{k} and h\_{s}= \frac{-h}{k}$

y = cot-1 *x*

Remember:

y = A sin (k**h) + vs

y = A cos (k**h) + vs

Calculate your Period here:

 $P\_{a}= \frac{π}{k} and h\_{s}= \frac{-h}{k}$

y = sec-1 **

Remember:

y = A sin (k**h) + vs

y = A cos (k**h) + vs

Calculate your Period here:

 $P\_{a}= \frac{2π}{k} and h\_{s}= \frac{-h}{k}$

y = csc-1 *x*

Remember:

y = A sin (k**h) + vs

y = A cos (k**h) + vs

Calculate your Period here:



 $P\_{a}= \frac{2π}{k} and h\_{s}= \frac{-h}{k}$

Solve the following as directed…Show ALL work:

Solve for x:

1. x = sin-1(0)
2. sin-1 (tan $\frac{π}{3}$)
3. Determine the Angular Velocity if 26 revolutions are completed in 40 seconds?
4. Given a central angle of $\frac{2π}{3}$, find the length of its intercepted arc in a circle of radius of 10 inches…show your answer in terms of pi (no calculator required)
5. Convert 210 degrees in to radians ( no calculator required)
6. The initial behavior of the note “E” above “middle C” can be modeled ***y = 0.5 sin t***
	1. What is the amplitude in this model?
	2. What is the period this model?
	3. Find the frequency (cycles per second) of this note