

* Don't forget your quiz will have a few review question from the last section!

NAME: ANSWERS?

TRIG GRAPHING QUIZ

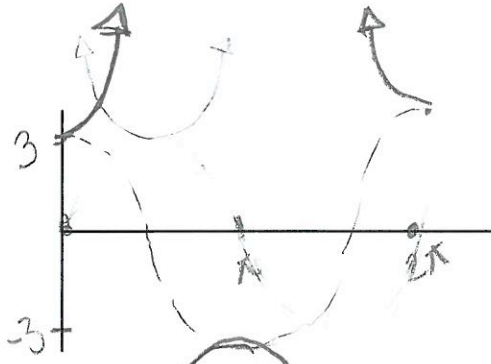
PART 1- radians

- 1) How many radian is 270° ?
- 2) How many degrees is $6\pi/4$ radians?

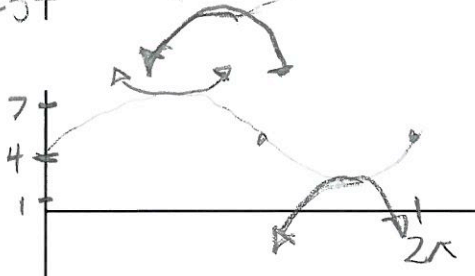


PART 2- graph each

2) $Y = 3\sec \theta$

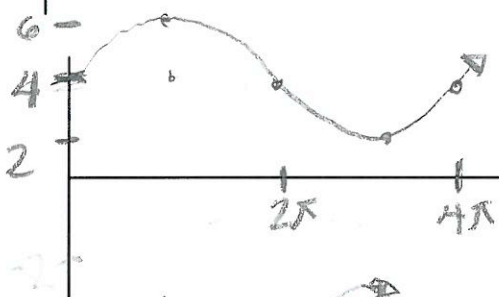


3) $Y = 3\csc \theta + 4$



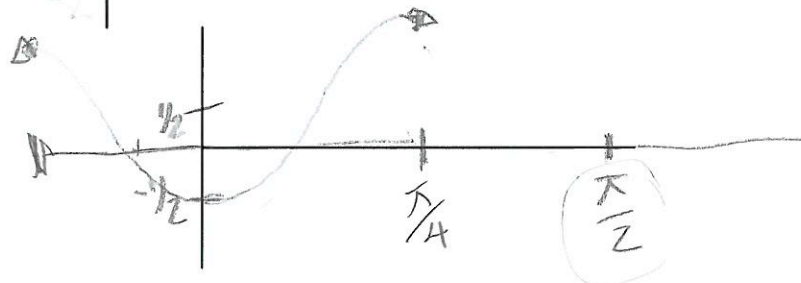
4) $Y = 2 \sin \frac{\theta}{2} + 4$

$Per = \frac{2\pi}{1/2} = 4\pi$



5) $Y = .5 \cos(4\theta + \pi)$

$Per = \frac{2\pi}{4} = \frac{\pi}{2}$



$-\frac{C}{K} = \frac{\pi}{4}$

PART 3-

Write the equation using the following information-

6) a sine function, with amplitude 4

$y = 4 \sin \theta$

7) A cosine function with an amplitude of .5 and a horizontal rise of 10.

$$y = .5 \cos \theta + 10$$

8) A sine curve, amplitude of 2, a period of π and a phase shift of $\pi/2$.

$$y = 2 \sin(2\theta - \pi)$$

$$P \text{ or } \frac{2\pi}{k} = \pi \quad k = 2$$

$$\frac{-c}{k} = \frac{-c}{2} = \frac{\pi}{2} \quad c = -\pi$$

9) If the sine curve of a *M* note is $y = .5 \sin(2\pi x t)$ the amplitude is .5 and the frequency is one.

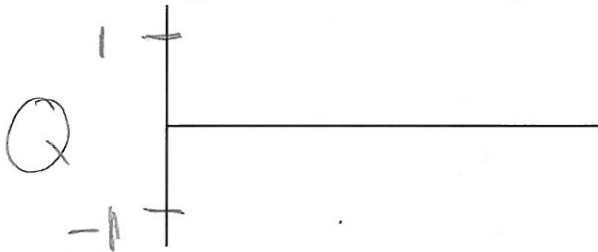
If a *Q* note has double the amplitude and double the frequency what is its equation?

$$f = \frac{1}{p} \quad \frac{1}{2} = f \quad p = 2$$

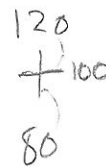
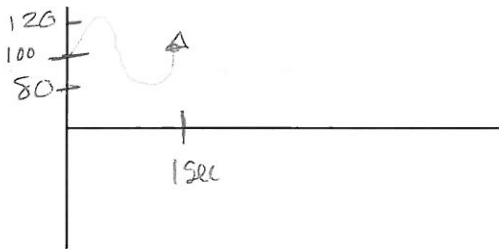
$$1 = f \quad p = 1$$

$$1 = \frac{2\pi}{k}$$

hmmmm...



10) Suppose a person's blood pressure oscillates between 120 and 80. If the heart beats once every second, write a sine function that models this person's blood pressure.



$$1 = \text{sec}$$

$$\frac{2\pi}{k} = 1$$

$$y = 20 \sin 2\pi t + 100$$

Part 4- matching...
 10. matching...

A $y=2\cot x$

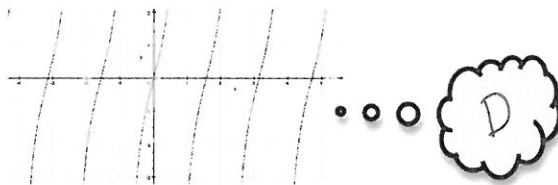
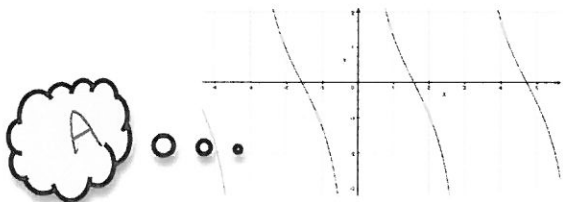
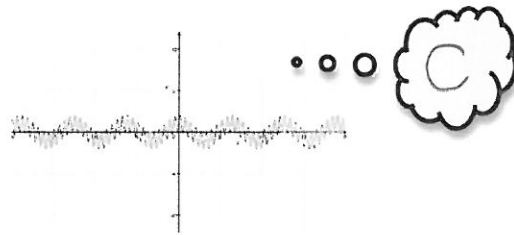
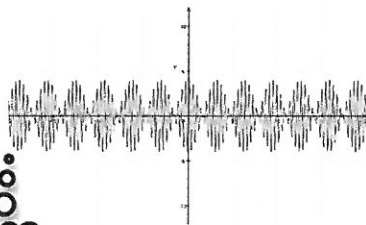
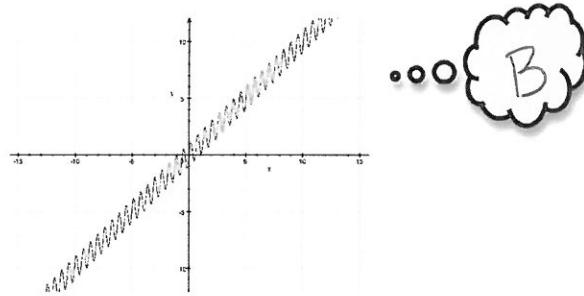
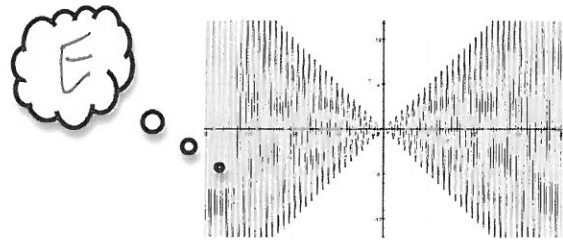
B $y=(\sin 10x)+(x)$

C $y=(\sin 10x)+\cos(x)$

D $y=2\tan 2x$

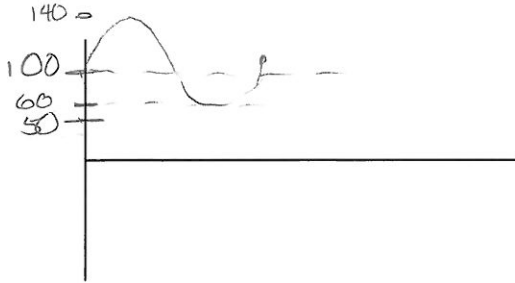
E $y=(\sin 10x)(x)$

F $y=(\sin 10x)\cos(x)$



PART 3-

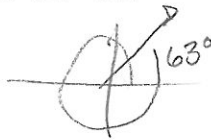
9) A pirate ship draws 50 feet of water. (*Draws*: the amount of water a boat must have before running aground) If the tide follows a pattern of $y=40\sin x+100$ will the boat escape running aground? How close is it?



It will be 10ft.

Surprise reviewers...

10) What would the reference angle of 423° be?



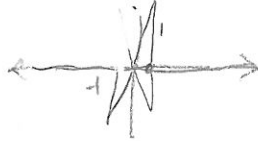
$$\begin{array}{r} 3 \times 123 \\ - 360 \\ \hline 63 \end{array}$$

11) If my sine is negative and my tangent is positive what quadrant am I?



$$\begin{array}{l} S = - \\ C = - \\ T = + \end{array} \quad \text{III}$$

12) If my sine is -1 what degrees would I be?



270°

13) Who's sine is $\frac{1}{2}$?

30°