

What month is your birthday?

What are the first 2 digits of your address?

What are the last 2 digits of your zip code?

What are the last 2 digits of your DeAnza ID number?

0 61 33 59 7SCORE: / 30 POINTS**NO CALCULATORS ALLOWED****YOU MUST SHOW PROPER WORK TO RECEIVE FULL CREDIT**Graph one period of the function $y = 2 - \csc \frac{\pi}{4} x$.SCORE: / 10 POINTSLabel the 5 important x -coordinates and 3 important y -coordinates on your graph as shown in class.Draw your graph on the axes included below.

$$\text{Period} = \frac{2\pi}{\frac{\pi}{4}} = 8$$

$$\text{Amp} = |1| = 1$$

$$8 \cdot \frac{1}{4} = 2$$

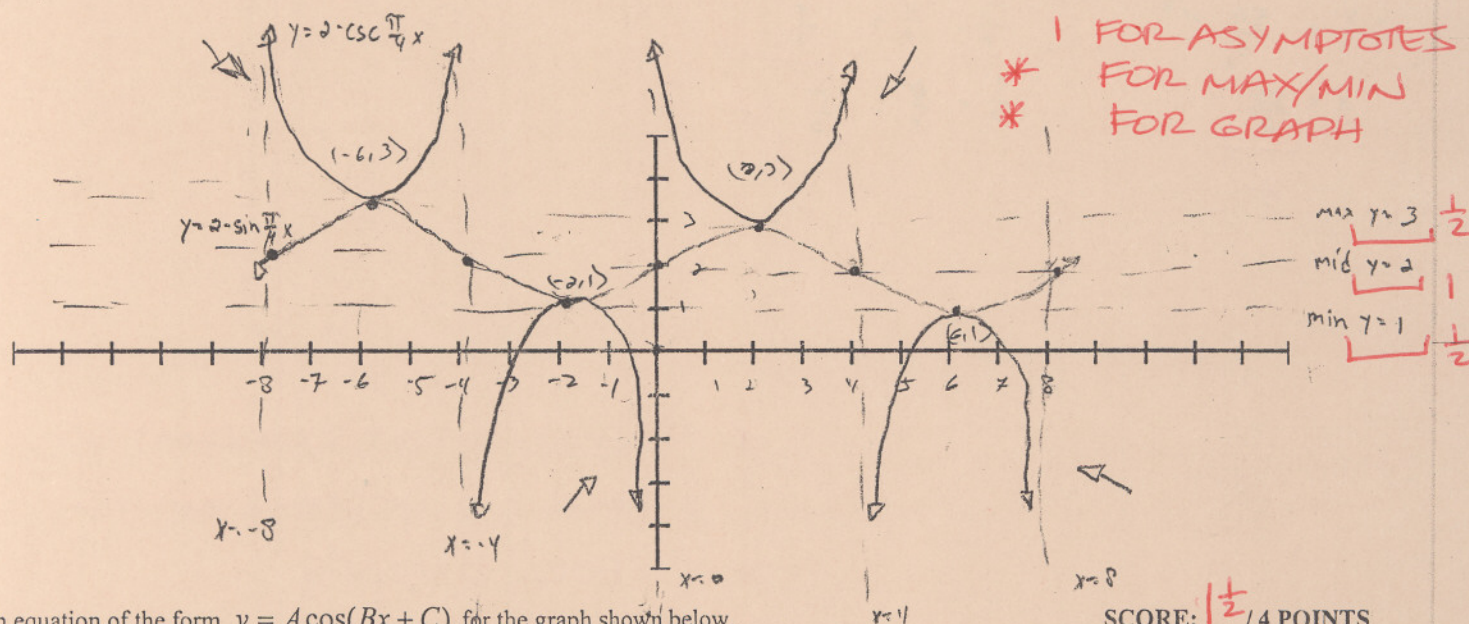
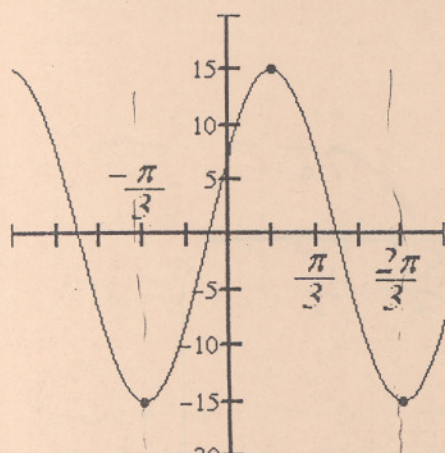
$$\frac{1}{2} \quad 0 + 2 = 2 \quad \frac{1}{2}$$

$$2 + 2 = 4 \quad \frac{1}{2}$$

$$4 + 2 = 6 \quad \frac{1}{2}$$

$$6 + 2 = 8 \quad \frac{1}{2}$$

$$\text{asymptote} = 4 + 4n / n \in \mathbb{Z}$$

Find an equation of the form $y = A \cos(Bx + C)$ for the graph shown below.SCORE: 1 1/2 / 4 POINTS

$$A = -15$$

$$\text{Period} = \pi$$

$$x\pi = \frac{\pi}{3}$$

$$\frac{3x\pi}{3\pi} = \frac{\pi}{3\pi}$$

$$x = \frac{1}{3}$$

$$y = -15 \cos\left(\pi x + \frac{1}{3}\right)$$



Fill in the blanks.

SCORE: ___ / 4 POINTS

- [a] The equations of the asymptotes of $y = \csc x$ are $\pi + n\pi / n \in \mathbb{Z}$
- [b] The period of $y = \csc x$ is 2π
- [c] The equations of the asymptotes of $y = \tan x$ are $\frac{\pi}{2} + n\pi / n \in \mathbb{Z}$
- [d] The period of $y = \tan x$ is π

Graph one period of the function $y = 3 \cos\left(\frac{x}{4} + \frac{5\pi}{8}\right) - 1$ using the procedure shown in class.

SCORE: ___ / 12 POINTS

Find all the relevant information (including labeling the 5 important x -coordinates and 3 important y -coordinates) as shown in class.

Draw your graph on the axes included below.

Amp = $1/3$

Mid = -1

Period = $\frac{2\pi}{1/4} = 8\pi$

$\frac{18\pi}{2} + \frac{5\pi}{2} = \frac{21\pi}{2}$

$\frac{21\pi}{2} - \frac{2\pi}{2} = \frac{17\pi}{2}$

$\frac{17\pi}{2} - \frac{4\pi}{2} = \frac{13\pi}{2}$

$\frac{13\pi}{2} - \frac{4\pi}{2} = \frac{9\pi}{2}$

$\frac{9\pi}{2} - \frac{4\pi}{2} = \frac{5\pi}{2}$

V.S. = $\frac{x}{4} + \frac{5\pi}{8} = 0$

$\frac{x}{4} = -\frac{5\pi}{8}$

$x = -\frac{5\pi}{2}$

* FOR 5 X-COORDINATES
1 FOR 3 Y-COORDINATES
* FOR 5 DOTS
* FOR GRAPH

