Precal Name: _____

Review Graphing

(Graphs & Equations of Trigonometric Functions)

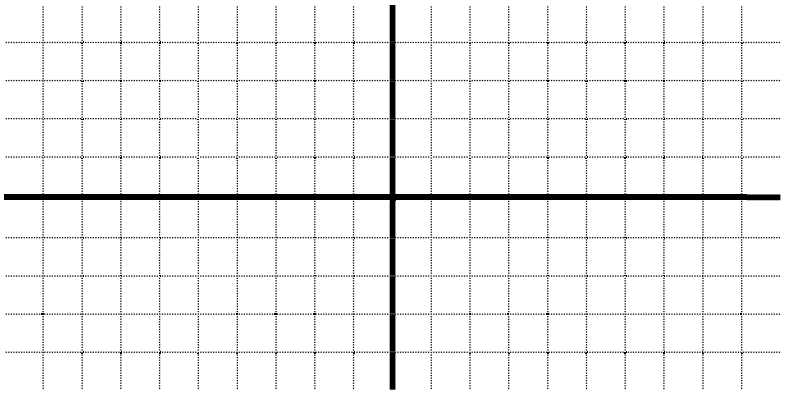
1) Graph at least two periods and show critical points: $y = -5\cos(2x - \pi)$

Domain: _____

Range: _____

Amp: _____ pd: _____

V.S.: _____ P.S.: _____



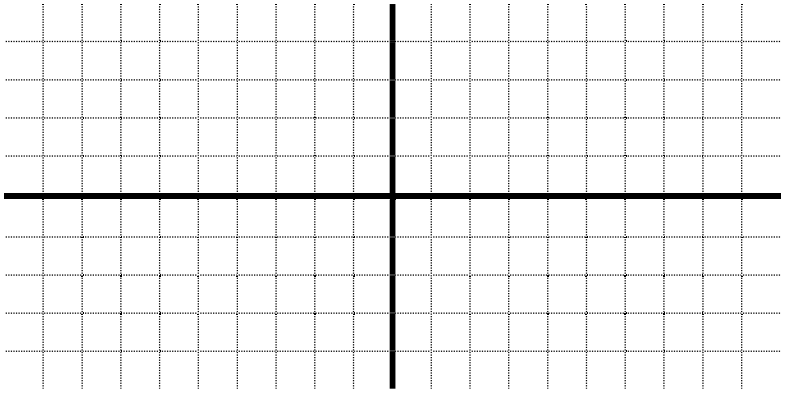
2) Graph at least two periods and show critical points: $y = 3\sin(0.5x - \pi) + 1$

Domain: _____

Range: _____

Amp: _____ pd: _____

V.S.: _____ P.S.: _____

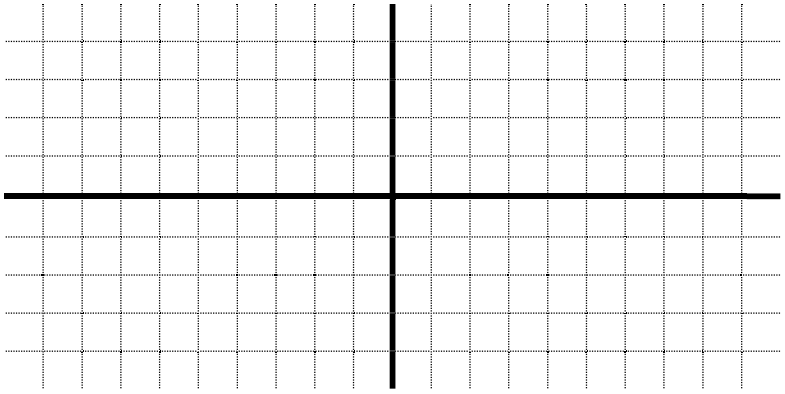


3) Graph at least two periods, show critical points & asymptotes: $y = 3\tan(2x - \pi)$

Range: _____

pd: _____

V.S.: _____ H.S.: _____

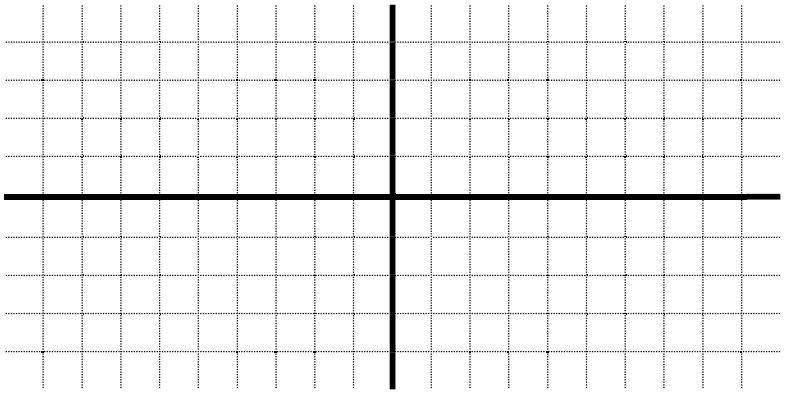


4) Graph at least two periods, show critical points, & asymptotes: $y = -\cot(.5x) + 2$

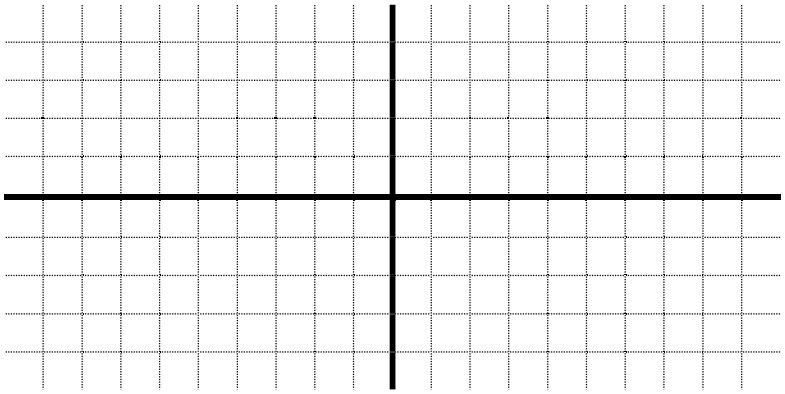
Range: _____

pd: _____

V.S.: _____ H.S.: _____



5) Graph at least two periods, & show asymptotes: $y = \sec(3x) + 2$

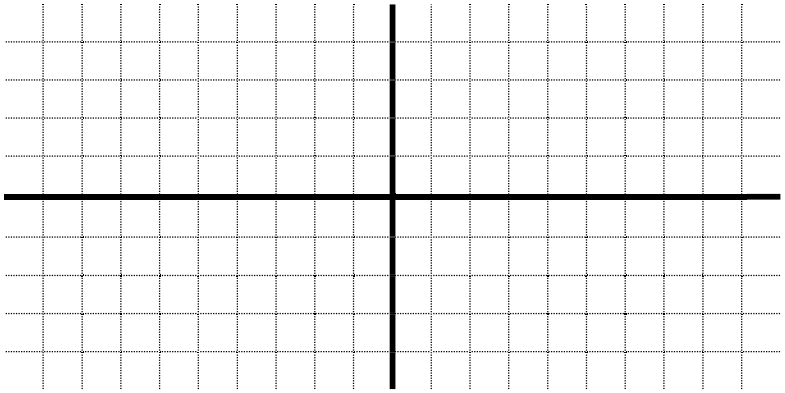


Range: _____

pd: _____

V.S.: _____ H.S.: _____

6) Graph at least two periods, & show asymptotes: $y = 4\csc(.5x)$

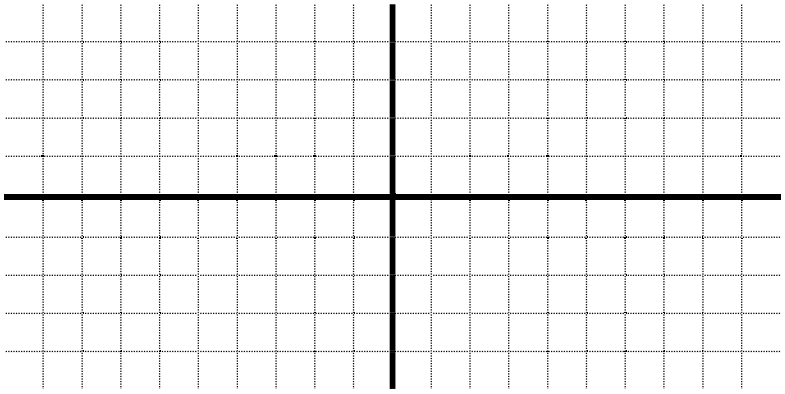


Range: _____

pd: _____

V.S.: _____ H.S.: _____

7) Graph at least two periods, & show asymptotes: $y = -2\sec(2x + \pi) - 2$

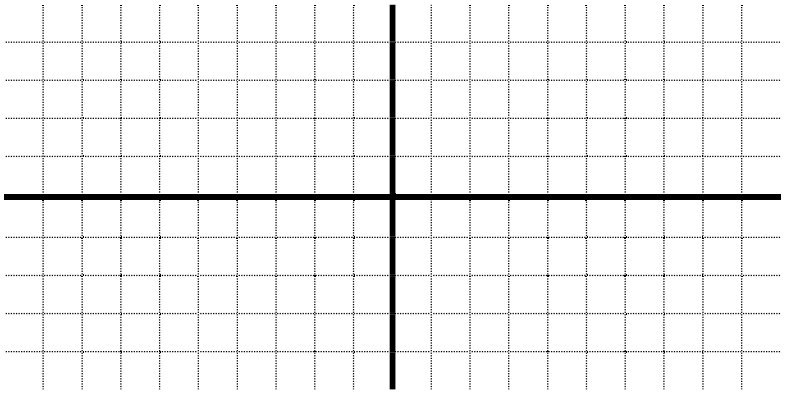


Range: _____

pd: _____

V.S.: _____ H.S.: _____

8) Graph at least two periods, & show asymptotes: $y = 3\csc[2(x - \pi)]$



Range: _____

pd: _____

V.S.: _____ H.S.: _____

9) Describe the transformations of a basic trigonometric function which would result in the function below:

a) $y = -3 \sec (x + 3) - 5$ b) $y = .7 \csc (3x - 4) + 1$

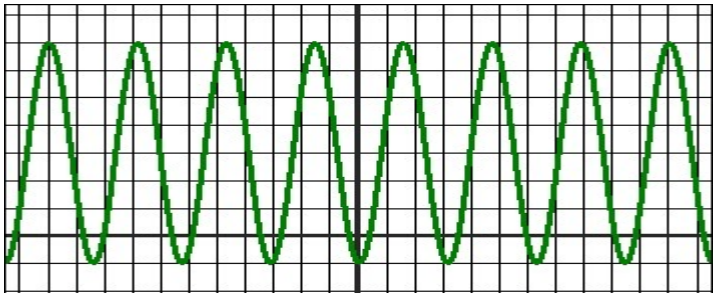
10) Construct a sinusoidal function using the information given: (this means give me an equation)

a) A cosine curve with reflected over x-axis, vertically stretched by a factor of 3, horizontally stretched by a factor of 2 and shifted left 4 units.

b) A sine curve reflected over the y-axis, vertically shrunk by a factor of 1/3, horizontally shrunk by a factor of 3, and shifted up 7 units.

c) Maximum located at (3, 1) & minimum located at (4, -7).

d) This is a cosine function graphed in a window [-4pi, 4pi] by [-2, 8.3]



11) Solve each of the following on the interval $0 \le x \le 2\pi$ (keep in mind how many answers there are…)

a) $\tan x = 1$ b) $\sec x = .5$ c) $\csc x = \frac{\sqrt{3}}{2}$ d) $\cot x = \frac{1}{\sqrt{3}}$