Bellwork Alg 2B 5th hr Tuesday, May 15, 2018

Graph one period of each function. Label the coordinates of the max's and min's and the equations of the VA.

1. $y = -7\text{Csc}8x + 1$

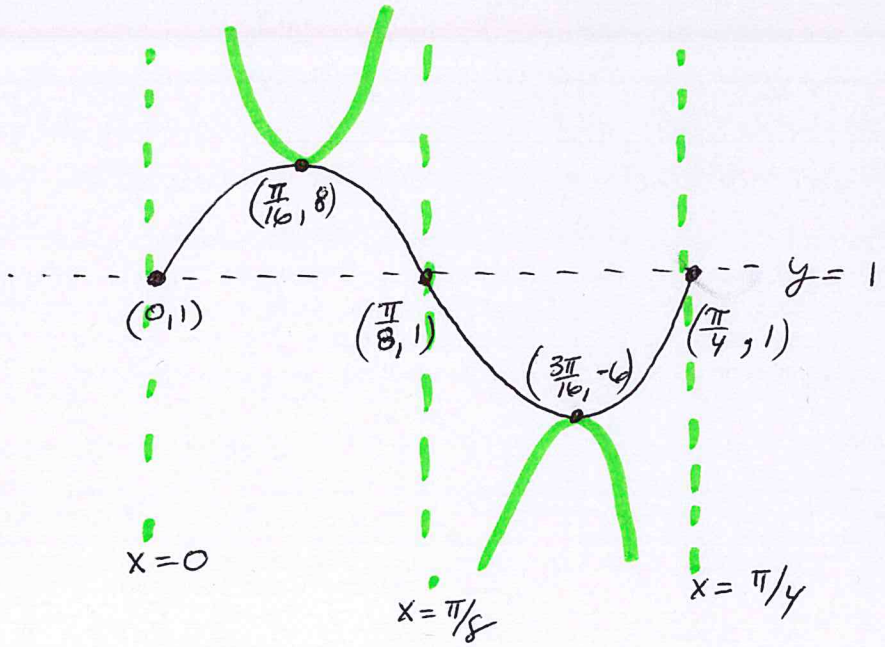
2. $y = 2\text{Sec}(4(x + \frac{\pi}{3})) - 9$

Bellwork Alg 2B 5th hr Tuesday, May 15, 2018 Answers

Graph one period of each function. Label the coordinates of the max's and min's and the equations of the VA.

1. $y = -7\text{Csc}8x + 1$ ⟶ $y = -7\sin 8x + 1$

- Amp = 7
- period = $\frac{2\pi}{8} = \frac{\pi}{4}$
- midline: $y = 1$
- No phase shift
- upside down



2. $y = 2\text{Sec}(4(x + \frac{\pi}{3})) - 9$ ⟶ $y = 2\cos(4(x + \frac{\pi}{3})) - 9$

amp = 2 period = $\frac{2\pi}{4} = \frac{\pi}{2}$ phase shift: $\pi/3$ left

midline: $y = -9$

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