

March 15

1. Determine 3 vertical asymptotes for each of the following functions:

a. $y = 2 \csc\left(x + \frac{\pi}{2}\right) + 3$

b. $y = 3 \csc\left(2x - \frac{\pi}{2}\right) - 1$

c. $y = \frac{1}{2} \sec\left(\frac{1}{2}x + \pi\right)$

d. $y = \sec\left(x - \frac{3\pi}{2}\right) + 4$