



1-

$$y = \tan 3x$$

Function	Vertical Asymptote	Vertical Asymptote	Intermediate Point	x-intercept	Intermediate Point
$y = \tan x$	$x = -\frac{\pi}{2}$	$x = \frac{\pi}{2}$	$(-\frac{\pi}{4}, -1)$	$(0, 0)$	$(\frac{\pi}{4}, 1)$
$y = \tan 3x$					

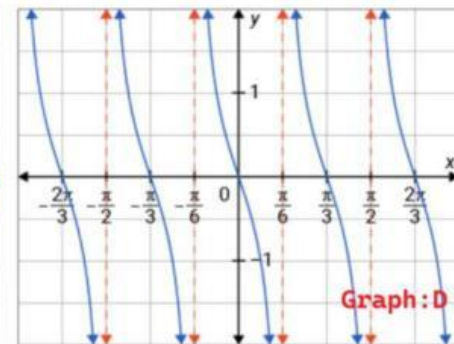
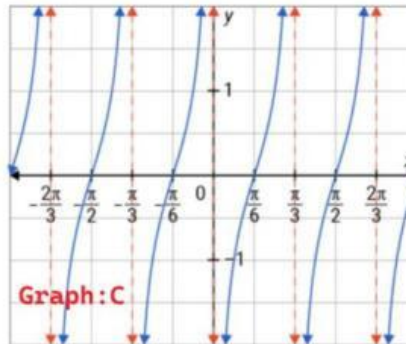
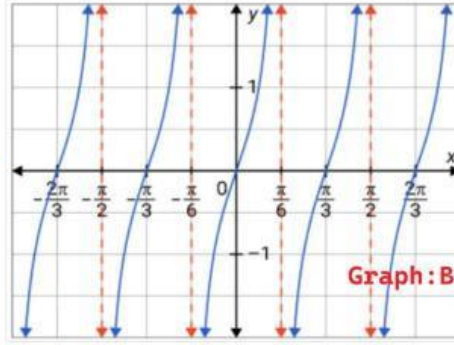
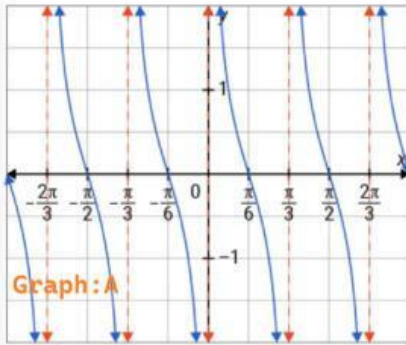
$$x = -\frac{\pi}{6}$$

$$(-\frac{\pi}{12}, -1)$$

$$(0, 0)$$

$$(\frac{\pi}{12}, 1)$$

$$x = \frac{\pi}{6}$$



Select the graph of  
 $y = \tan 3x$

$$2- \quad y = -\tan\left(x + \frac{2\pi}{3}\right).$$

Function	Vertical Asymptote $\longleftrightarrow$	Vertical Asymptote	Intermediate Point $\swarrow$	x-intercept	Intermediate Point $\swarrow$
$y = \tan x$	$x = -\frac{\pi}{2}$	$x = \frac{\pi}{2}$	$\left(-\frac{\pi}{4}, -1\right)$	$(0, 0)$	$\left(\frac{\pi}{4}, 1\right)$
$y = -\tan\left(x + \frac{2\pi}{3}\right)$					

$$\left(-\frac{11\pi}{12}, 1\right)$$

$$\left(-\frac{2\pi}{3}, 0\right)$$

$$\left(-\frac{5\pi}{12}, -1\right)$$

$$x = -\frac{7\pi}{6}$$

$$x = -\frac{\pi}{6}$$

