

$$(3) y = 3 \tan\left(2\theta + \frac{\pi}{4}\right) - 1$$

Vert stretch of 3

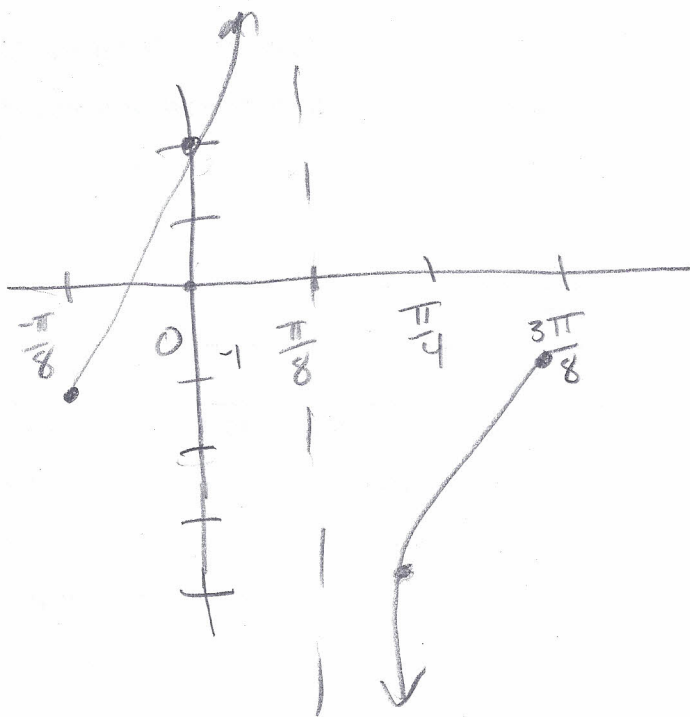
$$\text{Per} = \frac{\pi}{2}$$

$$\text{PS} = \frac{\pi}{8} \text{ (left)}$$

$$\text{VS} = -1$$

$$\frac{\pi}{8}$$

$-\frac{\pi}{8}$	
0	
$\frac{\pi}{8}$	
$\frac{2\pi}{8}$	$\frac{\pi}{4}$
$\frac{3\pi}{8}$	



$$(4) y = 1 + 2 \tan\left(2\theta - \frac{5\pi}{3}\right)$$

Vert stretch of 2

$$\text{per} = \frac{\pi}{2}$$

$$\text{PS} = \frac{5\pi}{6} \text{ (right)}$$

$$\text{VS} = 1$$

$$\frac{\pi}{8} = \frac{3\pi}{24}$$

$\frac{20\pi}{24}$	$\frac{5\pi}{6}$
$\frac{23\pi}{24}$	
$\frac{26\pi}{24}$	$\frac{13\pi}{12}$
$\frac{29\pi}{24}$	
$\frac{32\pi}{24}$	$\frac{4\pi}{3}$

