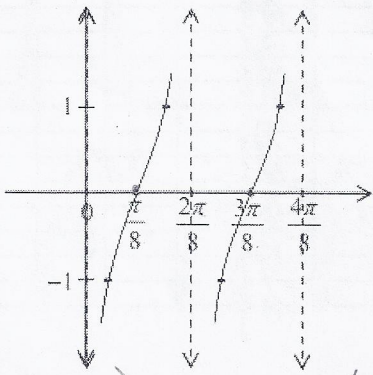


WS 4.3 Writing equations of cot/tan

Key

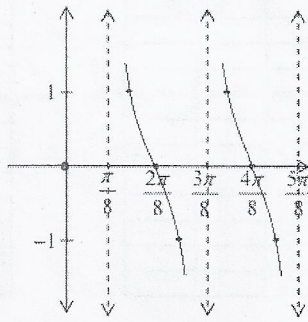
1.

per =  $\frac{\pi}{4}$



$y = \tan(4x - \frac{\pi}{2})$  or  $y = -\cot(4x)$

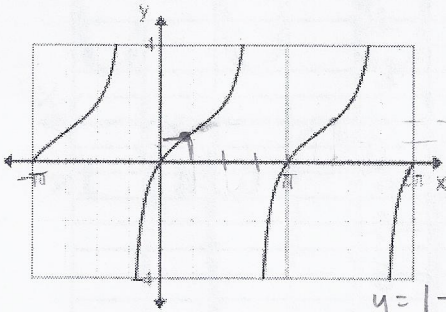
2.



per =  $\frac{\pi}{4}$

$y = -\tan(4x)$   
 $y = \cot(4x - \frac{\pi}{2})$  or  $y = -\tan(4x - \pi)$

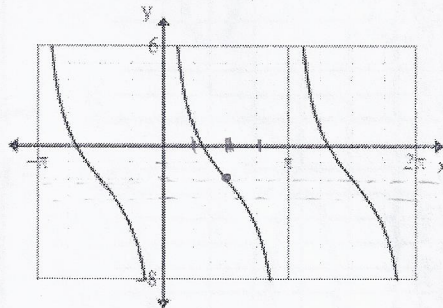
3.



per =  $\pi$

$y = 1 + \tan(x - \frac{\pi}{4})$  or  $y = 1 - \cot(x + \frac{\pi}{4})$

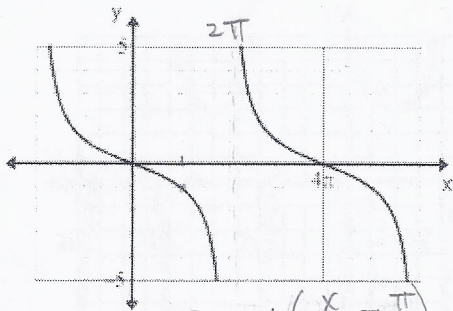
4.



per =  $\pi$

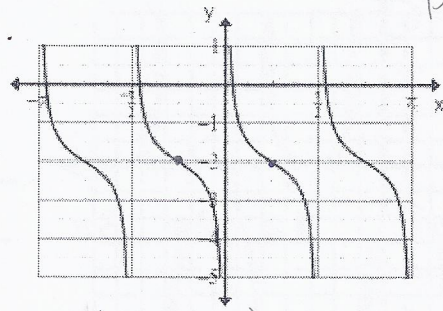
$y = -2 + 3\cot(x)$  or  $y = -2 - 3\tan(x + \frac{\pi}{2})$

5.



$y = \cot(\frac{x}{4} - \frac{\pi}{2})$   
 $y = -\tan(\frac{x}{4})$

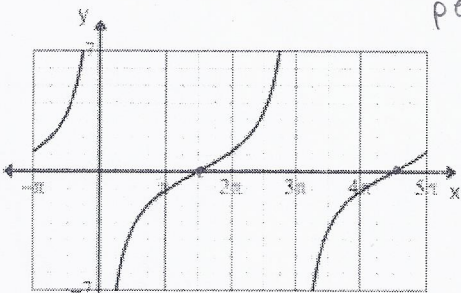
6.



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

$y = \frac{1}{2}\cot(2x) - 2$   
 $y = -\frac{1}{2}\tan(2x - \frac{\pi}{2}) - 2$

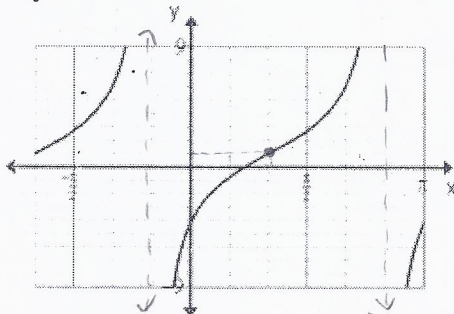
7.



per =  $3\pi$

$y = -2\cot(\frac{x}{3})$  or  $y = 2\tan(\frac{x}{3} - \frac{\pi}{2})$

8.



per =  $\pi$

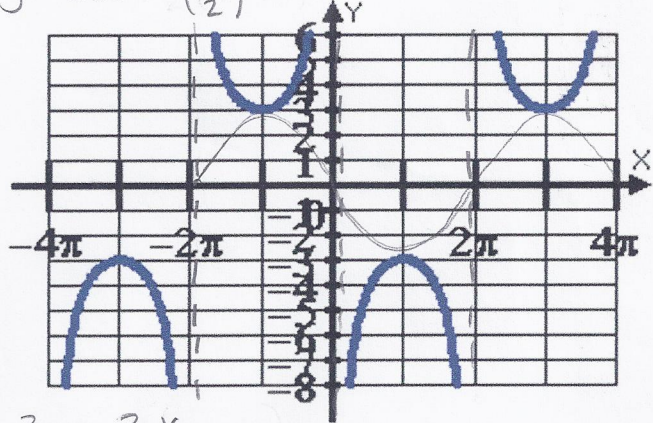
$y = 1 + 3\tan(x - \frac{\pi}{3})$  or

$y = 1 - 3\cot(x + \frac{\pi}{6})$



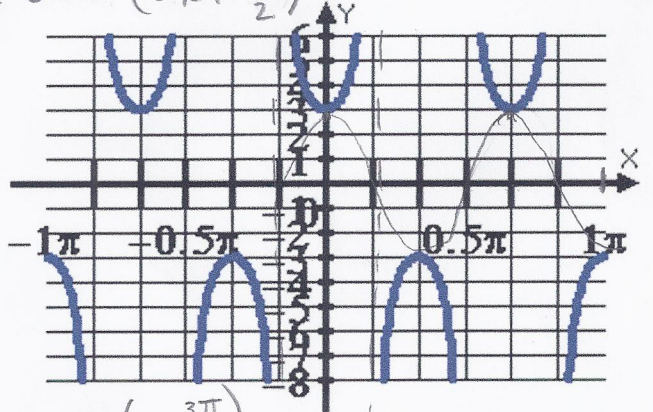
$$y = 3 \sec\left(\frac{x}{2} + \frac{\pi}{2}\right)$$

$$y = 3 \csc\left(\frac{x}{2}\right)$$



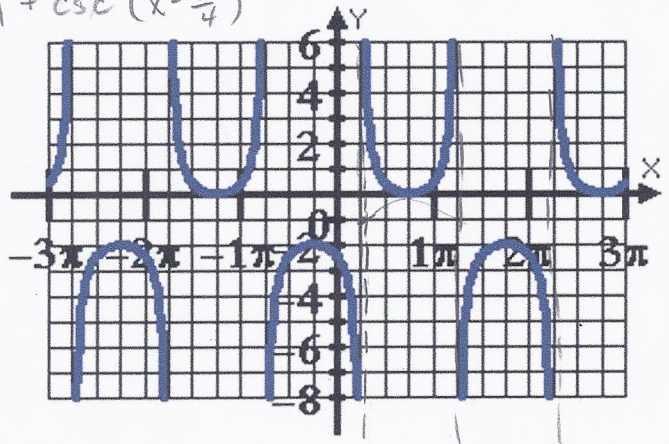
$$y = 3 \sec 3x$$

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



$$y = -1 + \sec\left(x - \frac{3\pi}{4}\right)$$

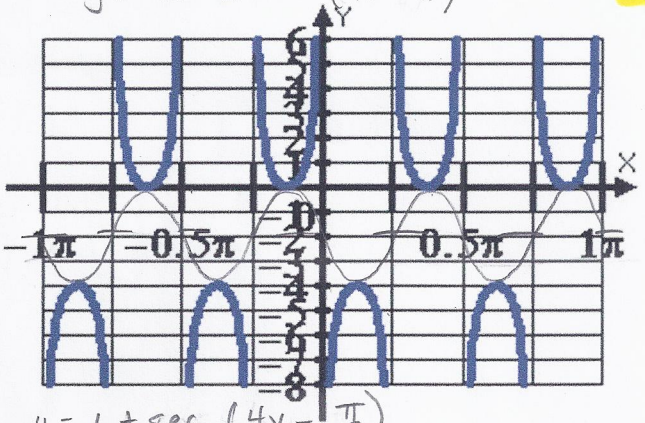
$$y = -1 + \csc\left(x - \frac{\pi}{4}\right)$$



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

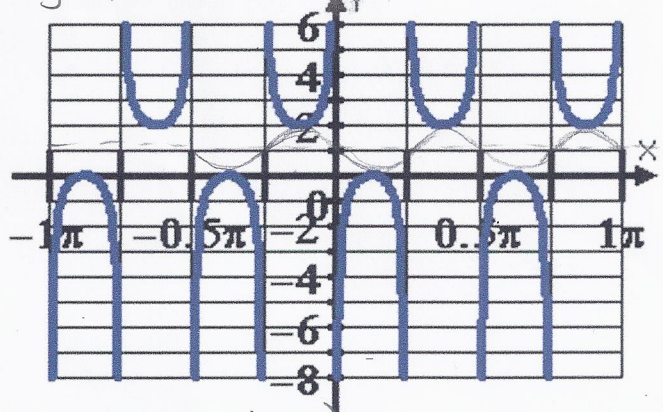
$$y = -2 + 2 \csc(4x - \pi)$$

Key



$$y = 1 + \sec\left(4x - \frac{\pi}{2}\right)$$

$$y = 1 + \csc(4x - \pi)$$



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

$$y = 2 + \csc(x - \pi)$$

