

Pg. 400 # 13-20, 32, 30-42 even

$$13) \cot\left(\frac{5\pi}{2}\right) = \frac{0}{1} = \boxed{0}$$

$$17) \sec 7\pi = \boxed{-1}$$

$$14) \tan(-8\pi) = \frac{0}{1} = \boxed{0}$$

$$18) \cot(-5\pi) = -\frac{1}{0} = \boxed{\text{und}}$$

$$15) \sec\left(\frac{9\pi}{2}\right) = \frac{1}{0} = \boxed{\text{und}}$$

$$19) \csc(-6\pi) = \frac{1}{0} = \boxed{\text{und}}$$

$$16) \csc\left(-\frac{5\pi}{2}\right) = -1$$

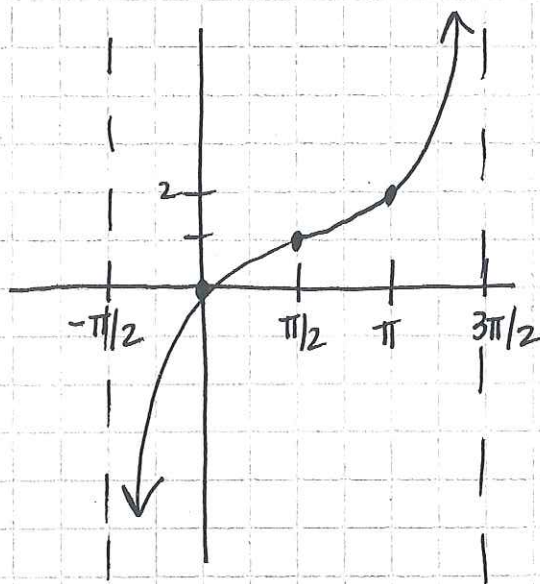
$$20) \tan(10\pi) = \frac{0}{1} = \boxed{0}$$

$$32) y = \tan\left(\frac{\theta}{2} - \frac{\pi}{4}\right) + 1$$

$$\text{period} = \frac{\pi}{k} = \frac{\pi}{1/2} = 2\pi$$

$$\text{Asymp: } -\pi \pm \pi$$

$\theta$	$w/ps$	
$-\pi$	$-\pi/2$	und
$-\pi/2$	0	0
0	$\pi/2$	1
$\pi/2$	$\pi$	2
$\pi$	$3\pi/2$	und



$$36) \text{period} = 2\pi \quad \frac{\pi}{k} = 2\pi \quad \pi = 2\pi k \quad k = 1/2$$

$$ps = 0$$

$$vs = -6$$

$$\boxed{y = \tan\left(\frac{\theta}{2}\right) - 6}$$

$$38) \quad \begin{array}{l} \text{period} = \pi \\ \text{ps} = -\pi/4 \\ \text{vs} = -10 \end{array} \quad \begin{array}{l} \frac{2\pi}{k} = \pi \quad \pi k = 2\pi \quad k = 2 \\ \frac{c}{k} = -\frac{\pi}{4} \quad \frac{c}{2} = -\frac{\pi}{4} \quad c = -\frac{\pi}{2} \end{array}$$

$$\boxed{y = \sec\left(2\theta + \frac{\pi}{2}\right) - 10}$$

$$40) \quad \begin{array}{l} \text{period} = 5\pi \\ \text{ps} = -\pi \\ \text{vs} = 12 \end{array} \quad \begin{array}{l} \frac{\pi}{k} = 5\pi \quad 5\pi k = \pi \quad k = 1/5 \\ \frac{c}{1/5} = -\pi \quad c = -\frac{\pi}{5} \end{array}$$

$$\boxed{y = \cot\left(\frac{\theta}{5} + \frac{\pi}{5}\right) + 12}$$

$$42) \quad \begin{array}{l} \text{period} = 3\pi \\ \text{ps} = -\pi \\ \text{vs} = 12 \end{array} \quad \begin{array}{l} \frac{2\pi}{k} = 3\pi \quad 2\pi = 3\pi k \quad k = 2/3 \\ \frac{c}{2/3} = -\pi \quad c = -\frac{2\pi}{3} \end{array}$$

$$\boxed{y = \sec\left(\frac{2\theta}{3} + \frac{2\pi}{3}\right) - 8}$$