(1) $y = 3\csc\left(2\theta + \frac{\pi}{6}\right) + 2$ sin

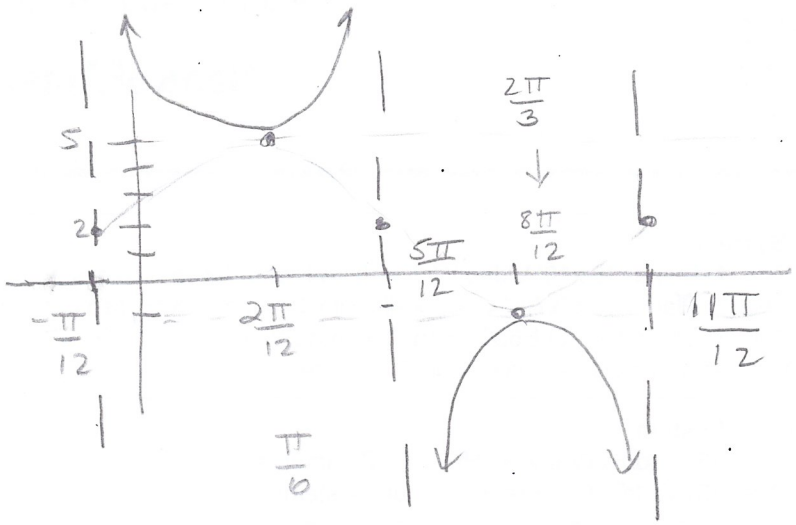
$A = 3$

$Per = \pi$

$PS = -\frac{\pi}{12}$ (left)

$VS = 2$

$\frac{\pi}{4} = \frac{3\pi}{12}$




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

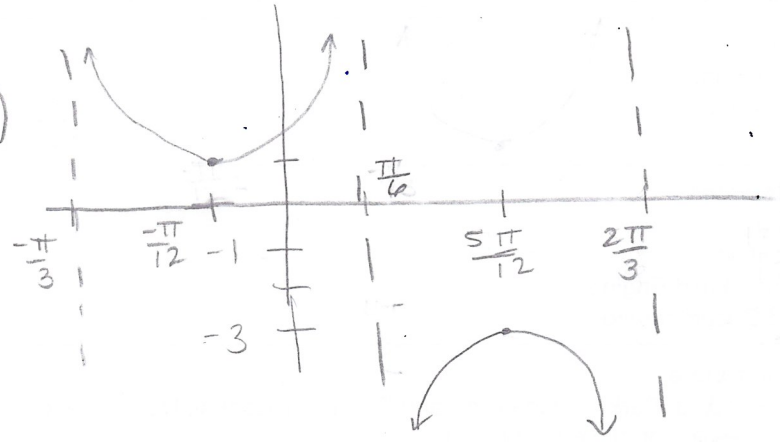
$A = 2$

$Per = \pi$

$PS = -\frac{\pi}{3}$ (left)

$VS = -1$

$\frac{\pi}{4} = \frac{3\pi}{12}$




| | | |
|---|---|---|
| $\frac{4\pi}{12} = -\frac{\pi}{3}$ | -1 | und |
| $-\frac{\pi}{12}$ | 1 | |
| $\frac{2\pi}{12} = \frac{\pi}{6}$ | -1 | und |
| $\frac{5\pi}{12}$ | -3 | |
| $\frac{8\pi}{12} = \frac{2\pi}{3}$ | -1 | und |

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

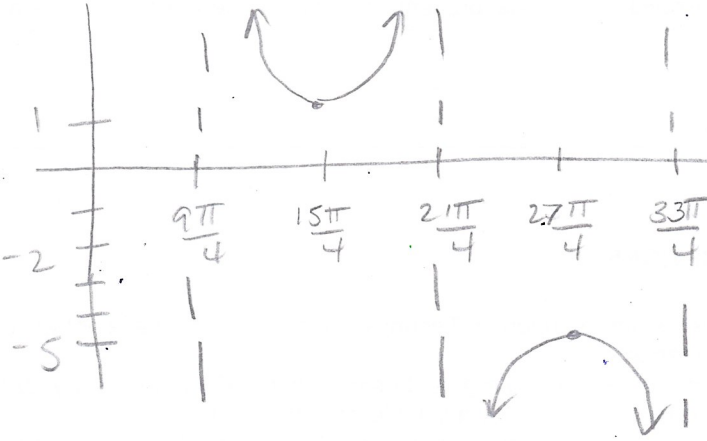
$A = 3$

$Per = 6\pi$

$PS = \frac{9\pi}{4}$ (right)

$VS = -2$

$\frac{6\pi}{4}$




| | | |
|---|---|---|
| $\frac{9\pi}{4}$ | -2 | und |
| $\frac{15\pi}{4}$ | 1 | 1 |
| $\frac{21\pi}{4}$ | -2 | und |
| $\frac{27\pi}{4}$ | -5 | -5 |
| $\frac{33\pi}{4}$ | -2 | und |

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

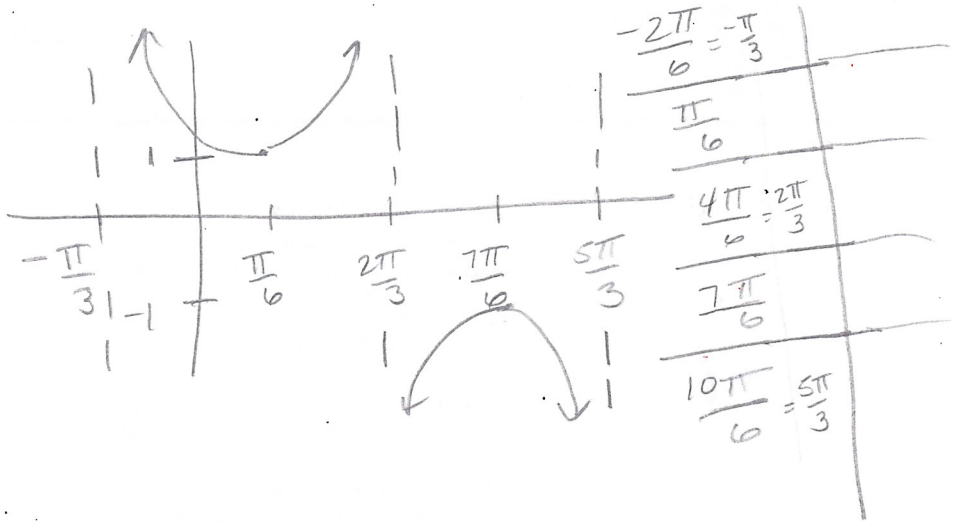
$A = 1$

$Per = 2\pi$

$PS = \frac{-\pi}{3}$ (left)

$VS = 0$

$\frac{2\pi}{4} = \frac{\pi}{2} = \frac{3\pi}{6}$




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

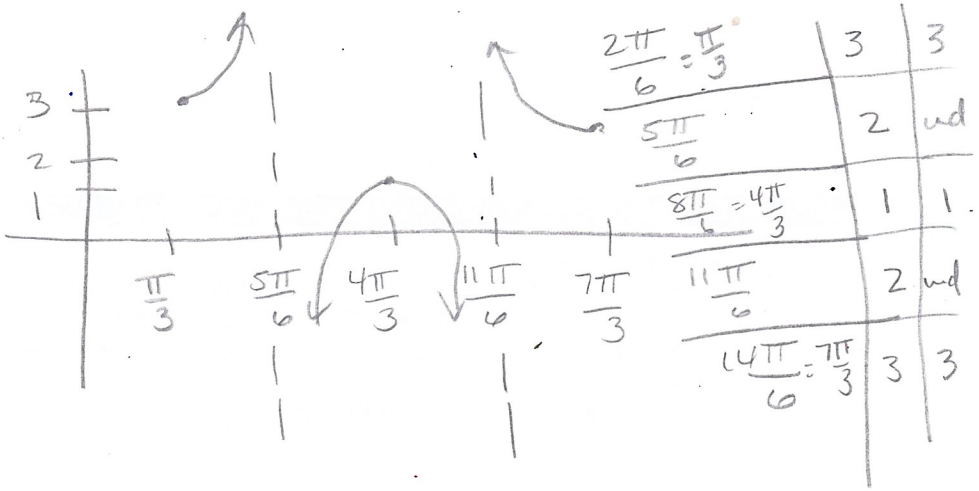
$A = 1$

$Per = 2\pi$

$PS = \frac{\pi}{3}$ (right)

$VS = 2$

$\frac{2\pi}{4} = \frac{\pi}{2} = \frac{3\pi}{6}$




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

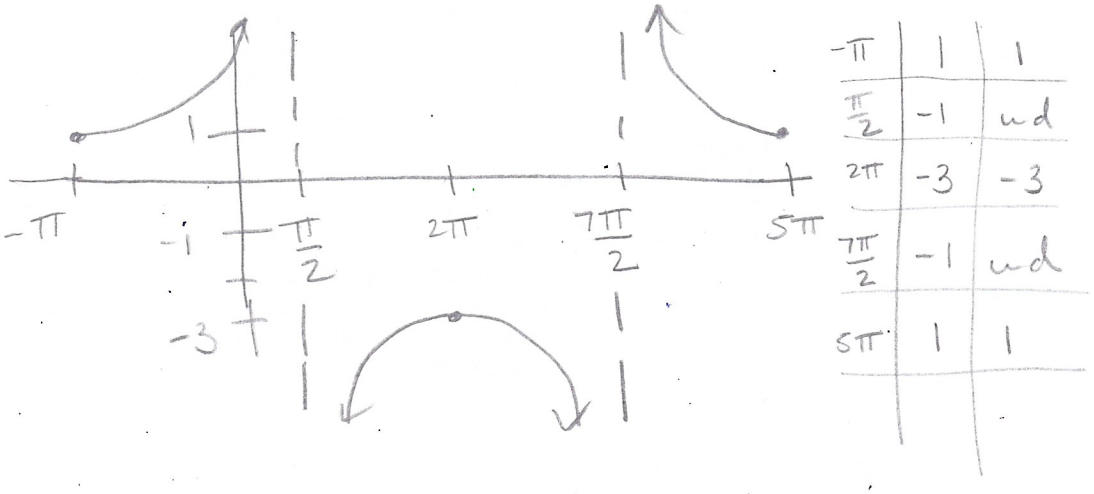
$A = 2$

$Per = 6\pi$

$PS = \pi$ (left)

$VS = -1$

$\frac{6\pi}{4} = \frac{3\pi}{2}$



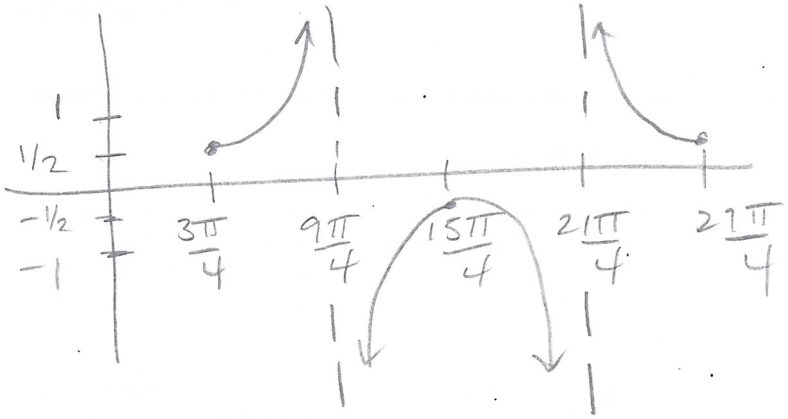
7. $y = \frac{1}{2}\sec\left(\frac{\theta}{3} - \frac{\pi}{4}\right)$

$A = \frac{1}{2}$

$Per = 6\pi$

$PS = \frac{3\pi}{4}$ (right)

$VS = 0$




$\frac{6\pi}{4}$

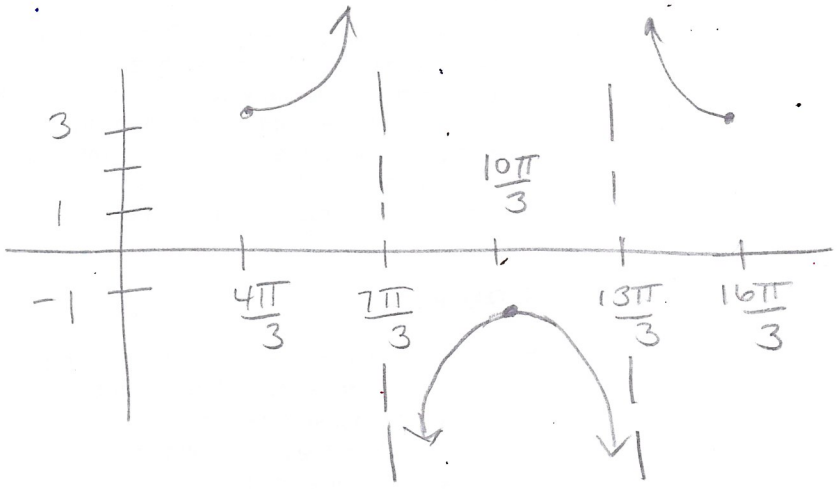
8. $y = 2\sec\left(\frac{\theta}{2} - \frac{2\pi}{3}\right) + 1$

$A = 2$

$Per = 4\pi$

$PS = \frac{4\pi}{3}$ (right)

$VS = 1$




$\frac{4\pi}{4} = \pi = \frac{3\pi}{3}$