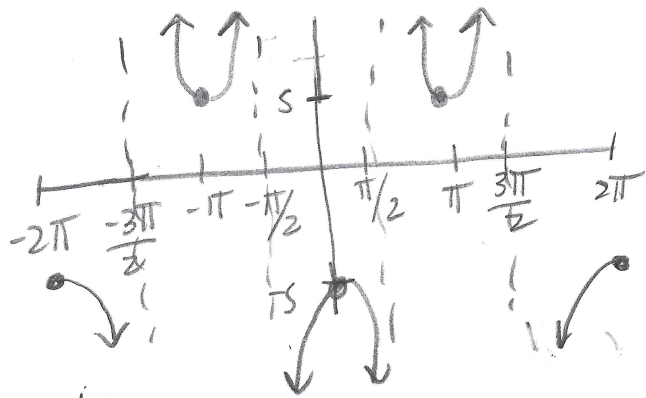


36. $f(t) = 5 \csc(t - \pi/2)$

Range:

$y \geq 5$

$y \leq -5$



$\frac{1}{\sin(t - \frac{\pi}{2})}$

$\frac{\pi}{2} \Rightarrow$ When $t = \frac{\pi}{2}$, $\sin(0) = 0$

38. $f(t) = -3 \sec(t + \pi)$

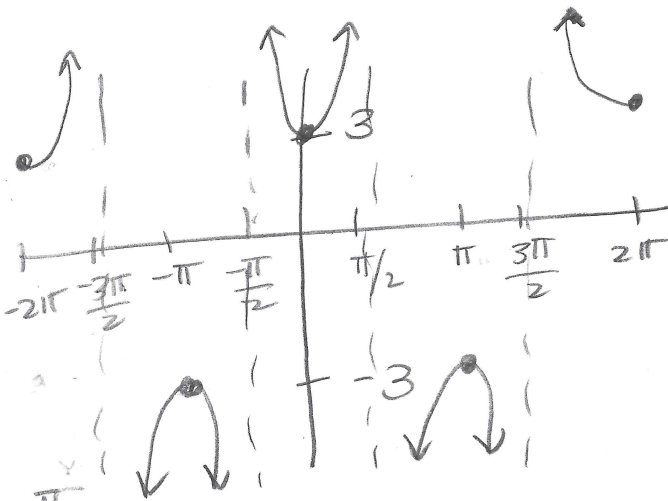
$\frac{1}{\cos(t + \pi)}$

$\Rightarrow \cos(-\frac{\pi}{2} + \pi) = 0$

$t + \pi = \frac{\pi}{2}$

$t = \frac{\pi}{2} - \pi = -\frac{\pi}{2}$

Range: $y \geq 3 \Rightarrow$ reflected over X-axis
 $y \leq -3$



39. Okay to verbally explain!

$\sec t = t \Rightarrow$ infinitely many

$y = t$ passes through $(-\frac{\pi}{2}, -\frac{\pi}{2})$ & $(\frac{\pi}{2}, \frac{\pi}{2})$

\rightarrow intersects the graph to right of $\frac{\pi}{2}$ & left of $-\frac{\pi}{2}$

\rightarrow answers may vary.