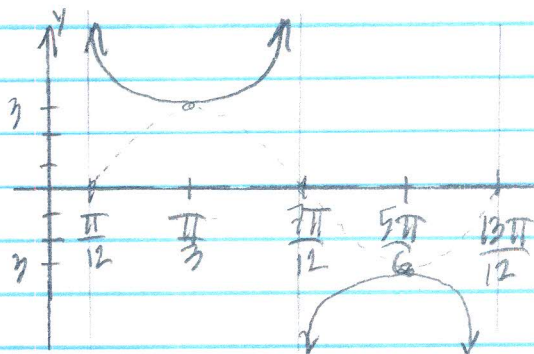


11. $y = 3 \csc\left(2x - \frac{\pi}{6}\right)$

$$2x - \frac{\pi}{6} = 0 \quad 2x - \frac{\pi}{6} = 2\pi$$

$$2x = \frac{\pi}{6} \quad 2x = \frac{13\pi}{6}$$

$$x = \frac{\pi}{12} \quad x = \frac{13\pi}{12}$$



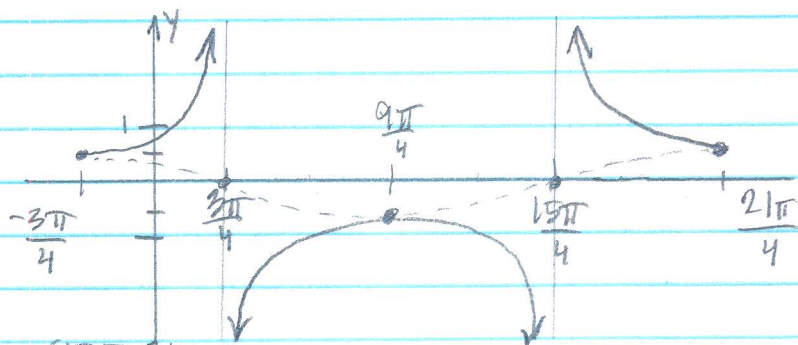
D: $\left(\frac{\pi}{12}, \frac{7\pi}{12}\right) \cup \left(\frac{7\pi}{12}, \frac{13\pi}{12}\right)$
 R: $(-\infty, -3] \cup [3, \infty)$

12. $y = \frac{1}{2} \sec\left(\frac{x}{3} + \frac{\pi}{4}\right)$

$$\frac{x}{3} + \frac{\pi}{4} = 0 \quad \frac{x}{3} + \frac{\pi}{4} = 2\pi$$

$$\frac{x}{3} = -\frac{\pi}{4} \quad \frac{x}{3} = \frac{7\pi}{4}$$

$$x = -\frac{3\pi}{4} \quad x = \frac{21\pi}{4}$$

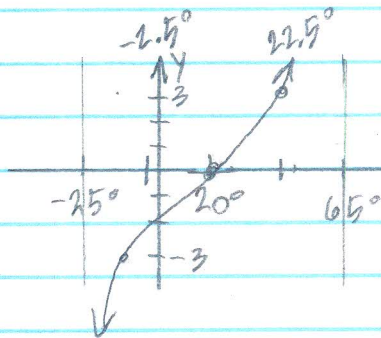


D: $\left[-\frac{3\pi}{4}, \frac{3\pi}{4}\right) \cup \left(\frac{3\pi}{4}, \frac{15\pi}{4}\right) \cup \left(\frac{15\pi}{4}, \frac{21\pi}{4}\right]$
 R: $(-\infty, -\frac{1}{2}] \cup [\frac{1}{2}, \infty)$

13. $y = 3 \tan(2\theta - 40^\circ)$

$$2\theta - 40^\circ = -90^\circ \quad 2\theta - 40^\circ = 90^\circ$$

$$\theta = -25^\circ \quad \theta = 65^\circ$$



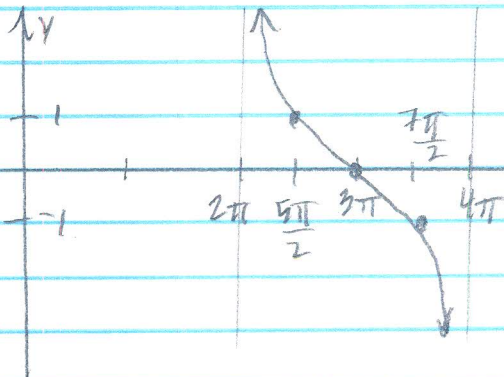
D: $(-25^\circ, 65^\circ)$
 R: $(-\infty, \infty)$

14. $y = \cot\left(\frac{x}{2} - \pi\right)$

$$\frac{x}{2} - \pi = 0 \quad \frac{x}{2} - \pi = \pi$$

$$\frac{x}{2} = \pi \quad \frac{x}{2} = 2\pi$$

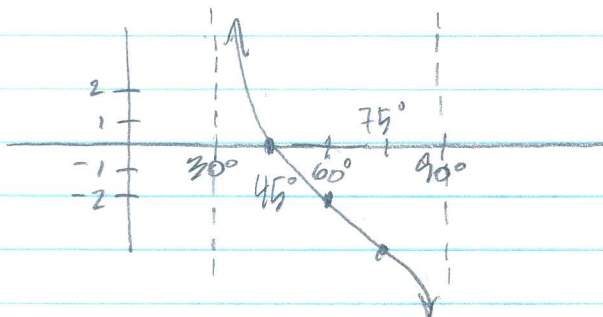
$$x = 2\pi \quad x = 4\pi$$



D: $(2\pi, 4\pi)$
 R: $(-\infty, \infty)$

15. $y = 2 \cot(3\theta - 90^\circ) - 2$

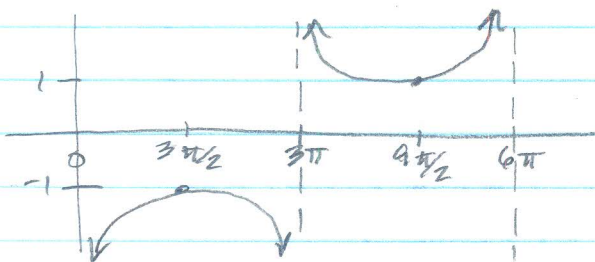
$3\theta - 90^\circ = 0$ $3\theta - 90^\circ = 180^\circ$
 $\theta = 30^\circ$ $\theta = 90^\circ$



D: $(30^\circ, 90^\circ)$
R: $(-\infty, \infty)$

16. $y = -\csc\left(\frac{x}{3}\right)$

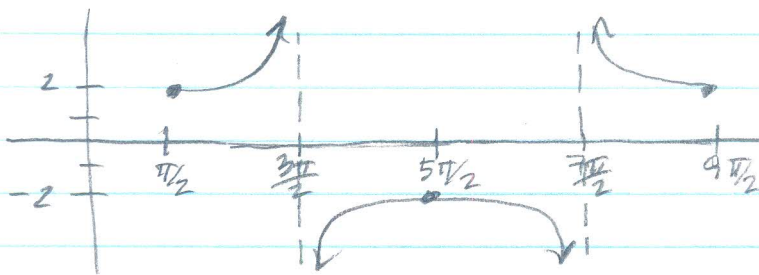
$\frac{x}{3} = 0$ $\frac{x}{3} = 2\pi$
 $x = 0$ $x = 6\pi$



D: $(0, 3\pi) \cup (3\pi, 6\pi)$
R: $(-\infty, -1] \cup [1, \infty)$

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

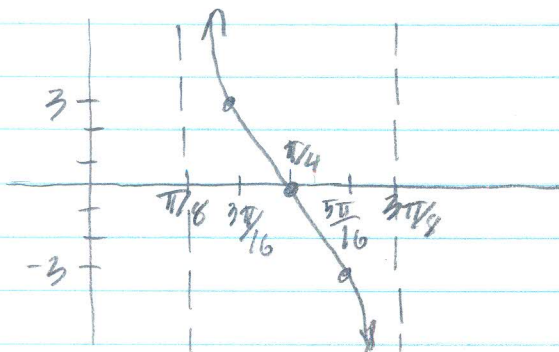
$\frac{x}{2} - \frac{\pi}{4} = 0$ $\frac{x}{2} - \frac{\pi}{4} = 2\pi$
 $x = \frac{\pi}{2}$ $x = \frac{9\pi}{2}$



D: $\left[\frac{\pi}{2}, \frac{3\pi}{2}\right) \cup \left(\frac{3\pi}{2}, \frac{7\pi}{2}\right) \cup \left(\frac{7\pi}{2}, \frac{9\pi}{2}\right]$
R: $(-\infty, -2] \cup [2, \infty)$

18. $y = -3 \tan(4x - \pi)$

$4x - \pi = -\frac{\pi}{2}$ $4x - \pi = \frac{\pi}{2}$
 $4x = \frac{\pi}{2}$ $4x = \frac{3\pi}{2}$
 $x = \frac{\pi}{8}$ $x = \frac{3\pi}{8}$



D: $\left(\frac{\pi}{8}, \frac{3\pi}{8}\right)$
R: $(-\infty, \infty)$