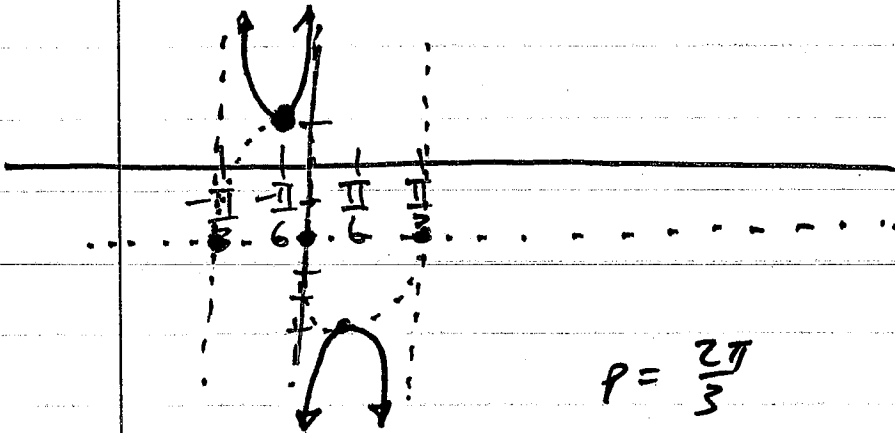


1.6

11)  $y = 3 \csc(3x + \pi) - 2$   
 $y = 3 \csc \frac{\pi}{3}(x + \frac{\pi}{3}) - 2$



$$\frac{0}{3} = 0 \quad -\frac{\pi}{3} = -\frac{\pi}{3}$$

$$\frac{\pi}{2} \cdot \frac{1}{3} = \frac{\pi}{6} - \frac{\pi}{3} = -\frac{\pi}{6}$$

$$\frac{\pi}{3} - \frac{\pi}{3} = 0$$

$$\frac{3\pi}{2} \cdot \frac{1}{3} = \frac{\pi}{2} - \frac{\pi}{3} = \frac{\pi}{6}$$

$$\frac{2\pi}{3} - \frac{\pi}{3} = \frac{\pi}{3}$$

$P = \frac{2\pi}{3}$

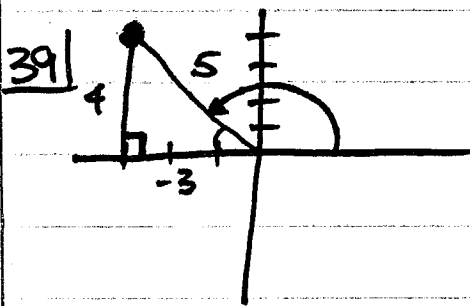
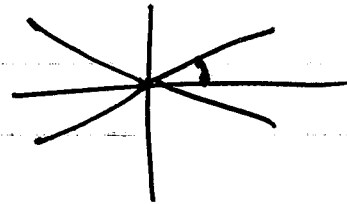
RANGE  $(-\infty, -5] \cup [1, \infty)$

DOMAIN: ALL REALS NOT MULTIPLES OF  $\frac{\pi}{3}$

33)  $\csc x = 2$   
 $\sin x = \frac{1}{2}$

$x \approx .524, 2.618$

$\pi - .524$



$\sin \theta = \frac{4}{5}$        $\csc \theta = \frac{5}{4}$   
 $\cos \theta = \frac{-3}{5}$        $\sec \theta = \frac{5}{-3}$   
 $\tan \theta = \frac{4}{-3}$        $\cot \theta = \frac{-3}{4}$

34)  $\sec x = -3$

$\cos x = -\frac{1}{3}$        $\cos^{-1}(\cos x) = \cos^{-1}(-\frac{1}{3})$

$x \approx 1.911$

$x =$

~~1.911~~  
~~-1.911~~

