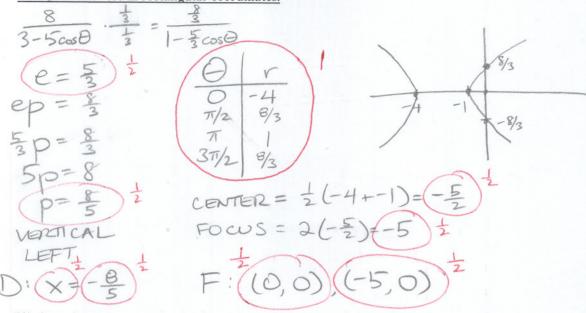
Code:	
I forgot my code, so please charge me	
two points: (Name)	

## THIS IS A NO CALCULATOR QUIZ

[5 POINTS] Find the equation of the directrix and the coordinates of <u>both</u> foci of the conic  $r = \frac{8}{3 - 5\cos\theta}$ 

Give your answers in rectangular coordinates.



[9 POINTS] Eliminate the parameter and write the corresponding rectangular equation.

(a) 
$$x = 2 - 5t \longrightarrow t = \frac{2 - x}{5}$$
 2  $x = 2 - 5\cos t \longrightarrow \cos t = \frac{2 - x}{5}$   $y = 3 - 2t$  (b)  $y = 3 - 2\sin t \longrightarrow \sin t = \frac{3 - y}{2}$   $y = 3 - 2\sin t \longrightarrow \cos t = \frac{3 - y}{2}$   $y = 3 - 4 - 2x \longrightarrow (5)$   $y = \frac{15 - 4 + 2x}{5}$   $\cos 2 \left(\frac{x - 2}{5}\right)^2 + \left(\frac{y - 3}{2}\right)^2 = 1$   $\cos 2 \left(\frac{x - 2}{5}\right)^2 + \left(\frac{y - 3}{2}\right)^2 = 1$   $\cos 2 \left(\frac{x - 2}{5}\right)^2 + \left(\frac{y - 3}{2}\right)^2 = 1$   $\cos 2 \left(\frac{x - 2}{5}\right)^2 + \left(\frac{y - 3}{2}\right)^2 = 1$   $\cos 2 \left(\frac{x - 2}{5}\right)^2 + \left(\frac{y - 3}{2}\right)^2 = 1$ 

[6 POINTS] Find a set of parametric equations for each graph.

(a) the line which passes through 
$$(4, -2)$$
 and  $(-1, 6)$  (b)  $x = 4 + (-1-4)t = 4-5t$   $y = -2 + (6-2)t = 2+8t$   $y = -1 + (4-1)t = 2+8t$   $y = 6 + (-2-6)t = 6+8t$