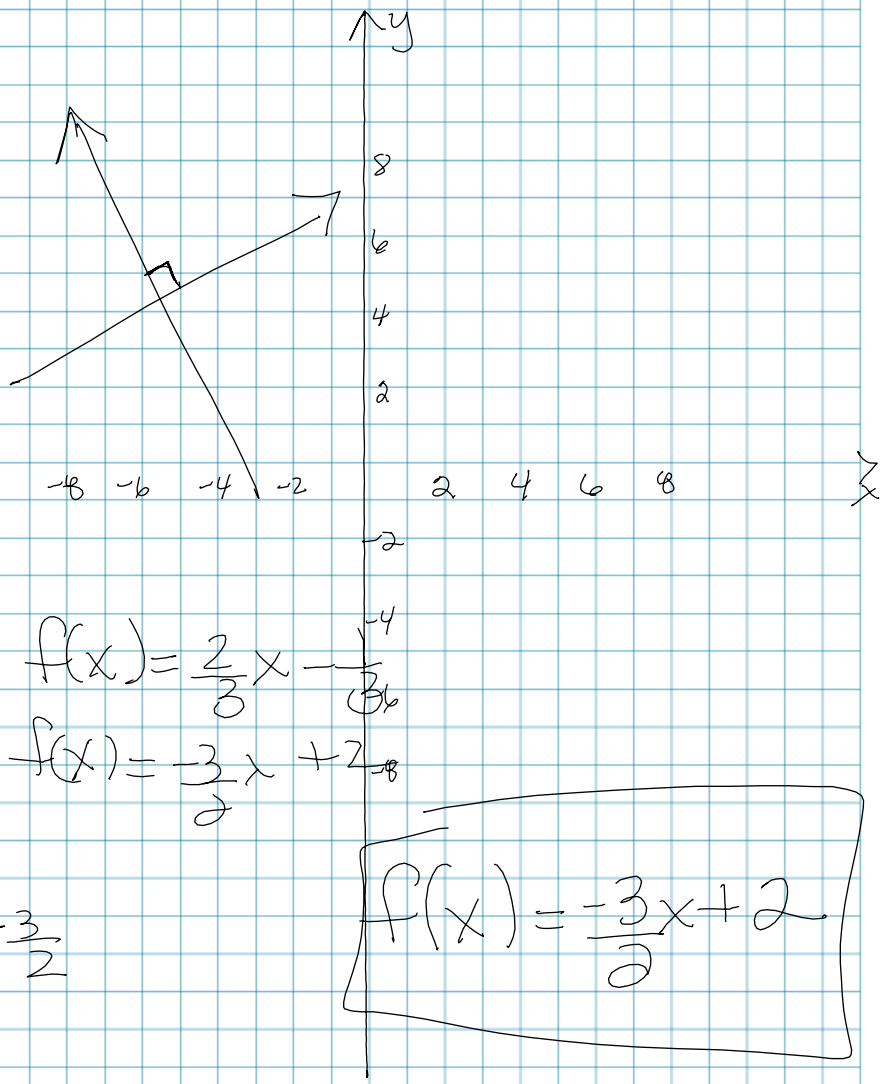
3) Through $(-4, 8)$; perpendicular to $2x - 3y = 1$



$f(x) = \frac{2}{3}x - \frac{1}{3}$

$f(x) = -\frac{3}{2}x + 2$

$\frac{2}{3} \quad -\frac{3}{2}$

$f(x) = -\frac{3}{2}x + 2$

cont.

$2x - 3y = 1$

$-2x \quad\quad -2x$

$\frac{-3y}{-3} = \frac{-2x+1}{-3} \quad \frac{1}{-3}$

$m = \frac{2}{3}$

$y = \frac{2}{3}x - \frac{1}{3}$

$m = -\frac{3}{2} \qquad (-4, 8)$

Point Slope Form

$y - y_1 = m(x - x_1)$

$x-(-4)$

$-\frac{3}{2} \cdot \frac{4}{1}$

$= -6$

$y - 8 = -\frac{3}{2}(x+4)$

$y - 8 = -\frac{3}{2}x - 6$

$+8 \quad\quad +8$

$y = -\frac{3}{2}x + 2$