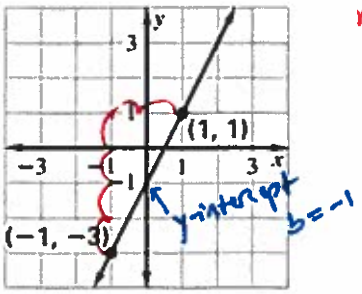
Name: Key

Unit 2 Review III

Given the line on the graph below, write the equation of the line:

A) In point slope form
B) In slope intercept form
C) In standard form
D) Through (-2,8) and parallel to the line graphed
E) Through (3,4) and perpendicular to the line graph
F) Find the inverse equation of the line graphed



$m = \frac{rise}{run} = \frac{4}{2} = 2$ OR $\frac{2}{1}$

$\frac{1 - -3}{1 - -1} = m$

$\frac{4}{2} = m$

$2 = m$

A) $y - 1 = 2(x - 1)$

B) From the graph $y = 2x - 1$

OR

$y - 1 = 2(x - 1)$

$y - 1 = 2x - 2$

$+1 \quad +1$

$y = 2x - 1$

C) $y = 2x - 1$

$-2x \quad -2x$

$-2x + y = -1$

x-int: $\frac{1}{2}$

y-int: -1

D) $y - 8 = 2(x + 2)$

same slope

Notice, directions didn't specify which form.

E) $y - 4 = -\frac{1}{2}(x - 3)$

↑ opposite reciprocal slope

F) $f^{-1}(x)$

$y = 2x - 1$

$x = 2y - 1$

$+1 \quad +1$

now solve for 'y' (put in $y = mx + b$ form)

$\frac{x + 1}{2} = \frac{2y}{2}$

$\frac{1}{2}x + \frac{1}{2} = y$

OR $y = \frac{1}{2}x + \frac{1}{2}$