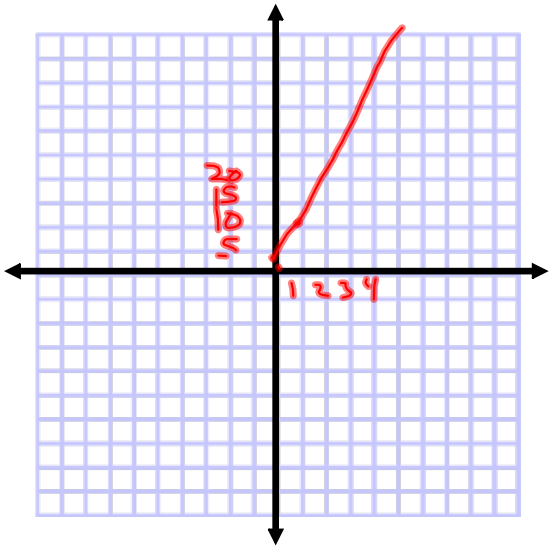
Homework Review - 4.7

41 $d(x) = 10x$

10mph = av. speed

x = # of hours



domain: $x \geq 0$

range: $d(x) \geq 0$

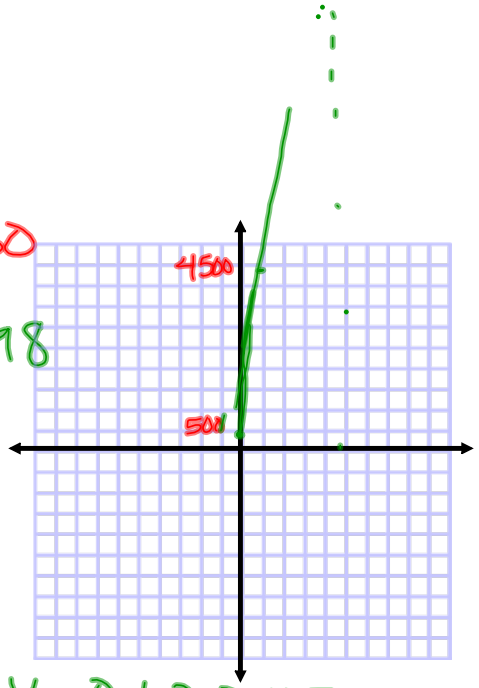
$$\frac{15}{10} = \frac{10x}{10} \qquad x = 1.5 \text{ hrs}$$

(40) 1998 - 2003

$f(x) = 4250x + 330$

X = years since 1998

year	x	f(x)
1998	0	4250(0)+330
1999	1	4250(1)+330
⋮	⋮	
2003	5	4250(5)+330



X = 0, 1, 2, 3, 4, 5

f(x) = ...

# of CDs sold →

$13080 = 4250x + 330$

$-330 \quad -330$

$\frac{12750}{4250} = \frac{4250x}{4250}$

$x = 3$ ← # years since 1998

1998 + 3

2001

Quiz!! 4.1 - 4.5, 4.7

Tuesday, 3/13

Foldables -

Study / practice aid

Use on quiz (with approval)

NOT for use on test!!

Using two points to graph a line ("Two Points Method")

"Using table"

1. Solve for y
2. Make a table - pick 2 or 3 values for x and calculate y
3. Graph the points & connect

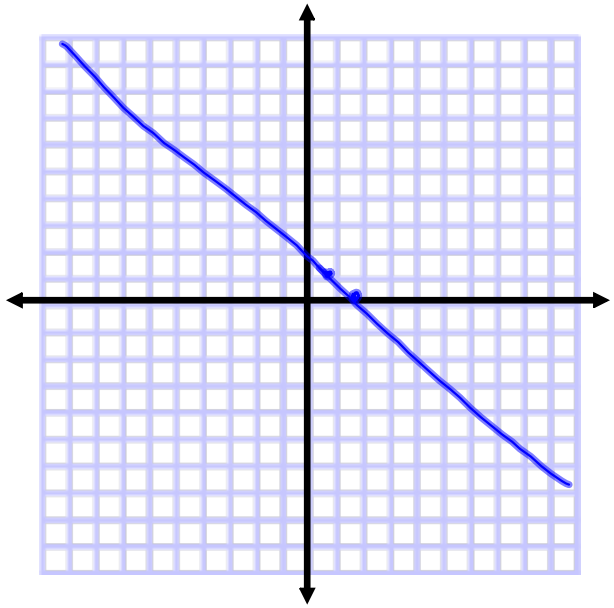
x	y
1	1
2	0

$$2x + 4y = 8 - 2x$$

$-2x \qquad -2x$

$$\frac{4y}{4} = \frac{-4x + 8}{4}$$

$$y = -x + 2$$



Using x and y interepts to graph a line ("x- and y- intercept method")

1. Set y=0 and solve for x to find the x-intercept, (x, 0)
2. Set x=0 and solve for y to find the y-intercept (0, y)
3. Graph the points and connect

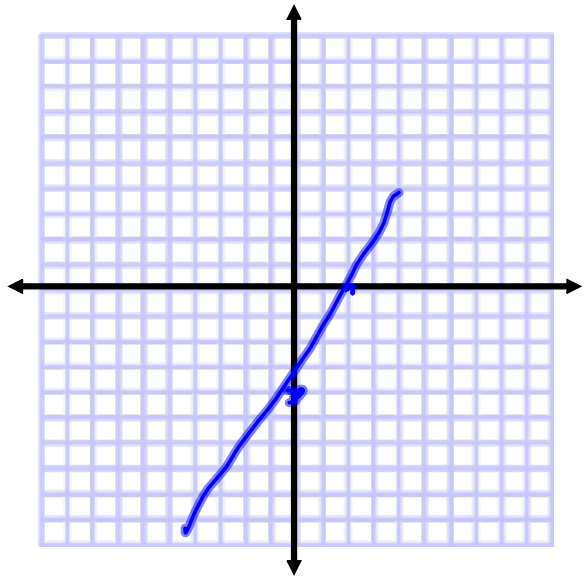
$6x + -3y = 12$

$6x + -3(0) = 12$

$\frac{6x}{6} = \frac{12}{6}$

$x = 2$

$(2, 0)$



$6(0) + -3y = 12$

$\frac{-3y}{-3} = \frac{12}{-3}$

$y = -4$

$(0, -4)$

Using slope-intercept form to graph a line ("slope-intercept method"):

1. Solve the equation for y (y = mx + b)
2. Plot the y-intercept (0, b)
3. Use the slope (m = rise/run) to find another point
4. Connect the points

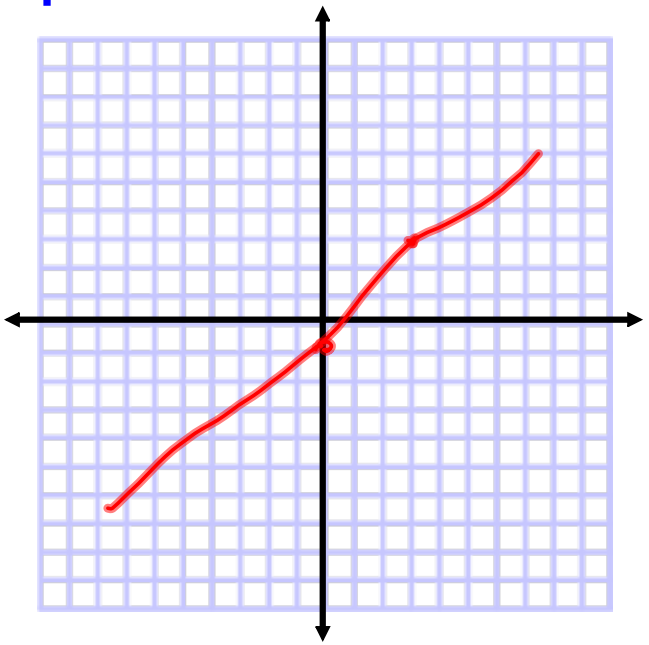
$3y - 2x = -3 + 2x$

$+2x \quad +2x$

$\frac{3y}{3} = \frac{4x - 3}{3}$

$y = \frac{4}{3}x - 1$

$(0, -1)$



$$m = \left(\frac{y_2 - y_1}{x_2 - x_1} \right)$$

slope

missing an x or y value (you have slope)