Homework review (4.2):

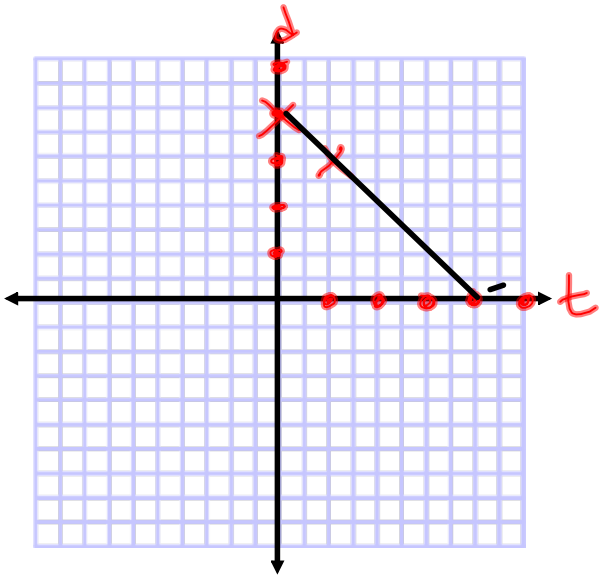
(36) 200 miles

$\frac{50 \text{ miles}}{1 \text{ hr}}$ = speed

d = distance

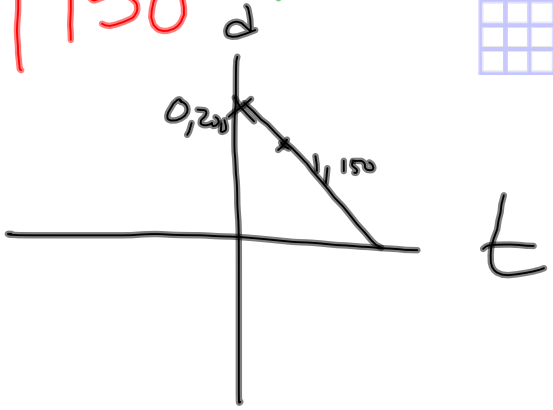
t = time

$d = 200 - 50t$



t	d
0	200
1	150

1.5 = 125 mil.



(16) $3y + 4x = 12$

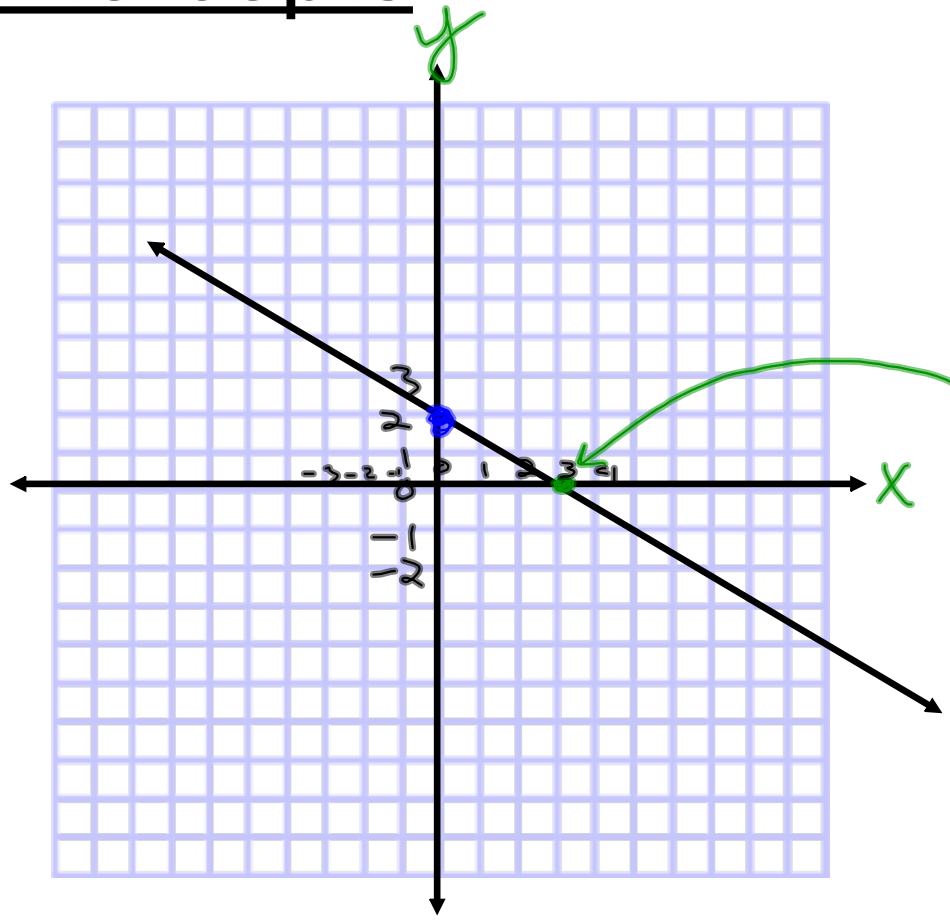
$-4x \quad -4x$

$$\frac{3y}{3} = \frac{-4x + 12}{3} = \frac{-4x}{3} + \frac{12}{3}$$

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

x	y
-3	8
0	4
3	0

Intercepts:



Where a graph crosses an axis

x-intercept: (y=0)
crosses the x-axis
(3,0)
x coordinate = 3

y-intercept: (x=0)
crosses the y-axis
(0,2)
y coordinate = 2

Finding Intercepts:

$2x + 3y = 18$

x-intercept: $y = 0$

$2x+3(0)=18$

$\frac{2x}{2}=\frac{18}{2}$

$x=9$

$x=9$

$(9,0)$

$2(0)+3y=18$

$\frac{3y}{3}=\frac{18}{3}$

$y=6$

y-intercept: $x = 0$

$y=6$

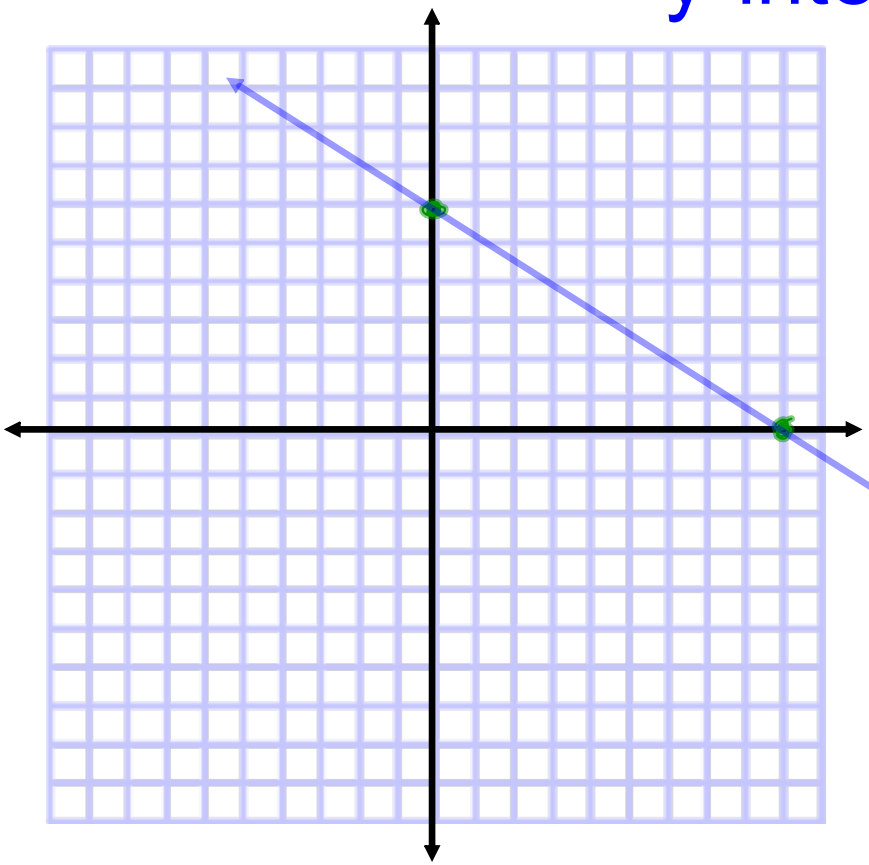
$(0,6)$

Graphing by finding intercepts:

$2x + 3y = 18$

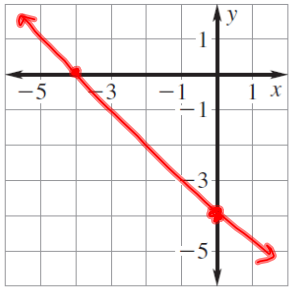
x-intercept: x=9 (y=0)

y-intercept: y=6 (x=0)



x	y
9	0
0	6

13. $y = -x - 4$



y-int: $x=0$

$y=-(0)-4$

$y=-4$

x-int: $y=0$

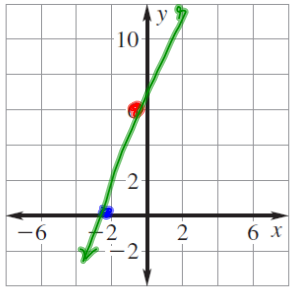
$-1(0)=(-x-4)-1$

$0=x+4$

$-4 \quad -4$

$-4=x$

14. $y = 6 + 3x$



$0=6+3x$

$-6 \quad -6$

$\frac{-6}{3}=\frac{3x}{3}$

$x=-2 \quad (-2,0)$

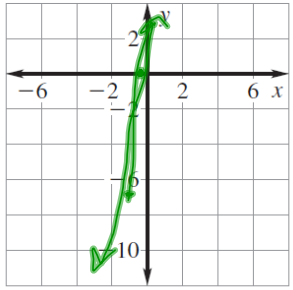
$y=0$

$y=6+3(0)$

$y=6 \quad (0,6)$

$x=0$

15. $y = 8x - 7$



$0=8x-7$

$+7 \quad +7$

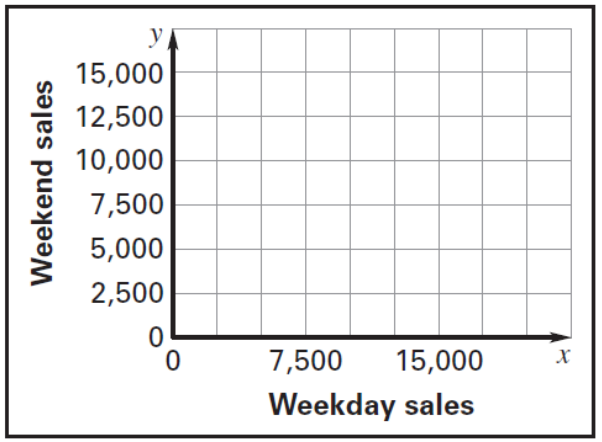
$\frac{7}{8}=\frac{8x}{8} \quad x=\frac{7}{8}$

$(\frac{7}{8},0)$

Home and Garden Show Admission to a home and garden show costs \$7 per person during the week and \$9 per person on the weekend. During one week of the show, a total of \$142,506 was paid in admissions. This situation can be represented by the equation $7x + 9y = 142{,}506$ where x is the number of tickets sold during the week and y is the number of tickets sold on the weekend.

a. Find the intercepts of the graph of the equation. Graph the equation.

b. Give three possibilities for the number of each kind of ticket that could have been sold for the week.



Homework p. 229:
2, 3, 6-24 (every 3rd), 32, 34, 45, 46