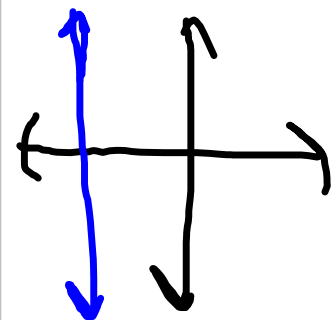pg. 218 Summary Chart: pg. 219; 1-33 (odd)

$y=b$
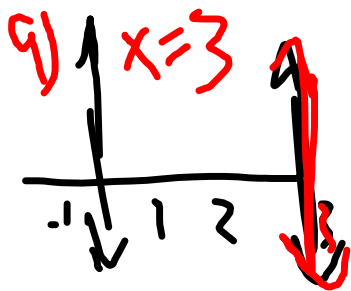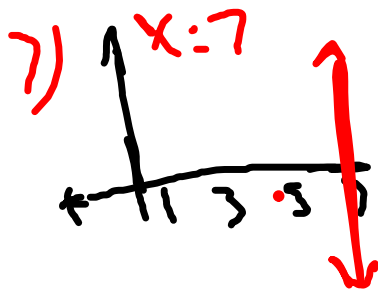
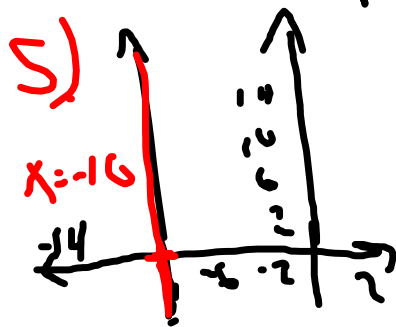5) $x=-16$

7) $x=7$

9) $x=3$

13) always
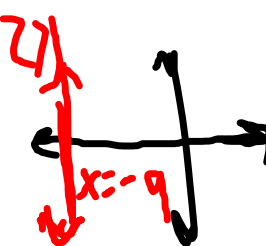
15) not solution

17) not solution

19) $\left(\frac{1}{2}, 0\right), \left(\frac{1}{2}, 2\right), \left(\frac{1}{7}, -7\right)$

21) $(0, -5), (1, -5), (-3, -5)$

23) $(0, 7), (-2, 7), (-3, 7)$

25) $y=8$

27) $x=-9$

29) $x=-\frac{1}{4}$

31) $x=-4$

$x=a$

1) horizontal

3) constant

5) never

33) #11: No domain: D5 range: 116

B.D = 54; domain: 0-116; range 54
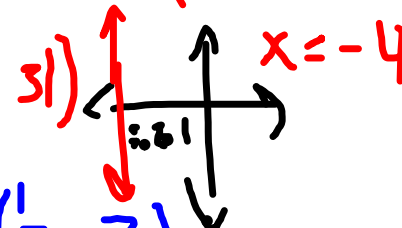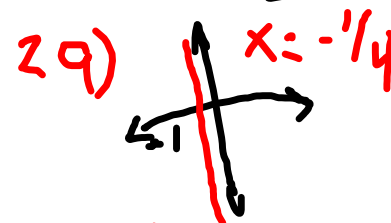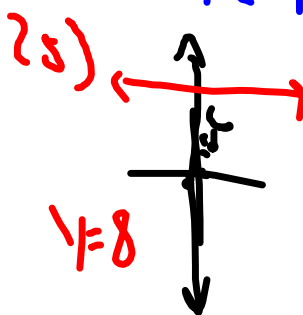
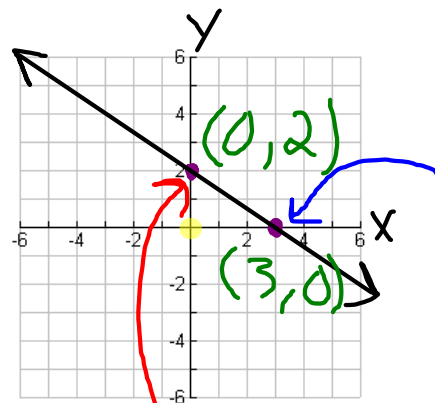# 4.4 Graphing Lines; Using The Intercepts.

x-intercept: the x-coordinate of a point where a graph crosses the x-axis.

2 Pts = line

y-intercept: the y-coordinate of a point where a graph crosses the y-axis.

(0,2)

(3,0)

The x-int. is the value of x when $y=0$. Here it is 3.

The y-int. is the value of y when $x=0$. Here it is 2!

Title: Nov 09 - 7:17 AM (2 of 6)

find the x & y intercepts of
the graph $2x + 3y = 6$ → Standard Form

x-int. $(y=0)$

$2x + 3(0) = 6$

$2x + 0 = 6$

$2x = 6$

$\dfrac{2x}{2} = \dfrac{6}{2}$

x-int.

$\underline{x = 3}$

y-int $(x = 0)$

$2(0) + 3y = 6$

$0 + 3y = 6$

$-0 \qquad -0$

$\dfrac{3y}{3} = \dfrac{6}{3}$

$\underline{y = 2}$ x-int

Quick Graph: $3x + 2y = 12$

① find the x+y intercepts
② Plot those Points → ∞∞ the coord.
③ Connect the Dots.

$\underline{\text{X-int}}$ $(y=0)$ $\qquad$ $\underline{\text{Y-int}}$ $(x=0)$

$3x + 2(0) = 12$ $\qquad$ $3(0) + 2y = 12$

$$\frac{3x}{3} = \frac{12}{3} \qquad \frac{2y}{2} = \frac{12}{2}$$

$$\underline{X = 4} \qquad \qquad \underline{Y = 6}$$

$3x + 2y = 12$
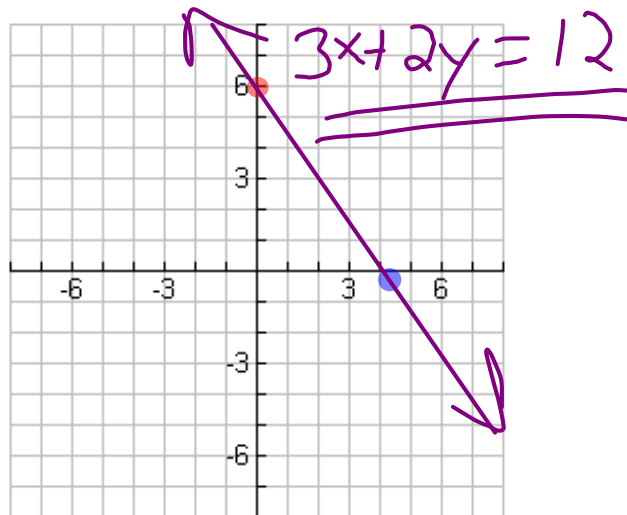
Choose the Scale:

Quick Graph for $y = 4x + 40$

g function form

x-int ($y = 0$)

$(0) = 4x + 40$

$-40 \qquad -40$

$-40 = 4x$

$\dfrac{-40}{4} = \dfrac{4x}{4}$

$x = -10$

y-int ($x = 0$)

$y = 4(0) + 40$

$y = 40$

$y = 4x + 40$
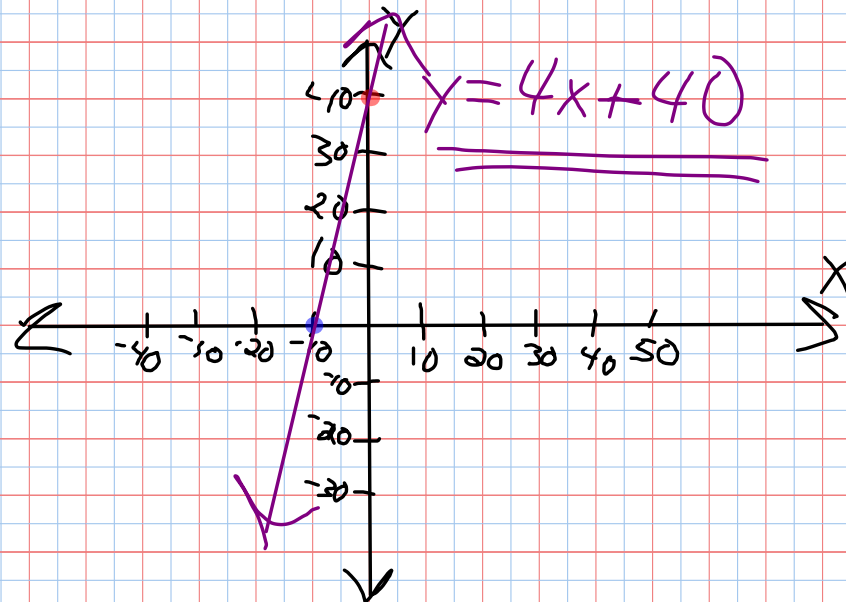
O.T.L.

① Pg 225:

1-35 (odd)

36-38 (all)