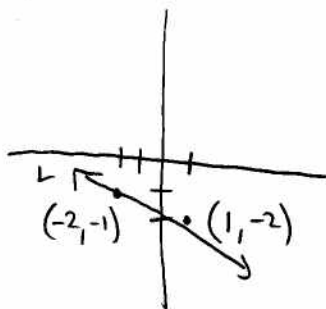


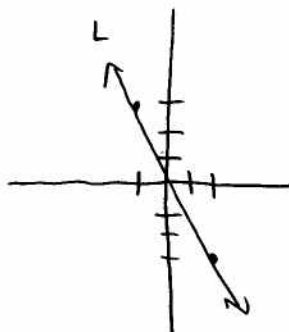
3. $(-3, 1)$ $(-8, 1)$ Slope = 0
 Distance = $\sqrt{5^2 + 0^2} = 5$

6.



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

7. L is the line from $A(2, -3)$ to $B(-1, 3)$



Slope = $\frac{6}{-3} = -2$

9. Horizontal $y = 3$
 Vertical $x = 2$

12. Horizontal $y = 0$
 Vertical $x = -\pi$

15. $y - y_1 = m(x - x_1)$ $y - 3 = 2(x - 0)$

18.

$$(1, 1) \quad (2, 1)$$

$$Ax + By + C = 0$$

$$m = 0 \quad \text{Horizontal}$$

$$0x + 1y - 1 = 0$$

$$y = 1$$

$$\boxed{y - 1 = 0}$$

20.

$$(-2, 1) \quad (2, -2)$$

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

$$m = \frac{-3}{4}$$

$$4y - 4 = -3x - 6$$

$$\boxed{3x + 4y + 2 = 0}$$

21.

$$m = 3 \quad b = -2$$

$$\boxed{y = 3x - 2}$$

24.

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

27.

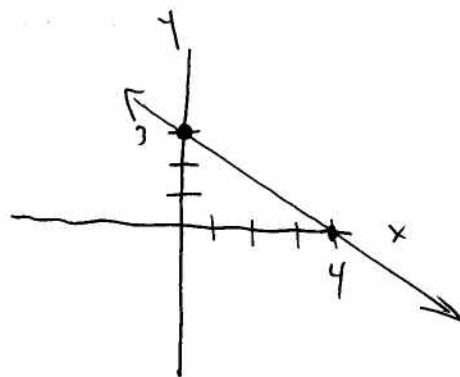
$$3x + 4y = 12$$

$$m = -\frac{3}{4}$$

$$4y = -3x + 12$$

$$b = 3$$

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

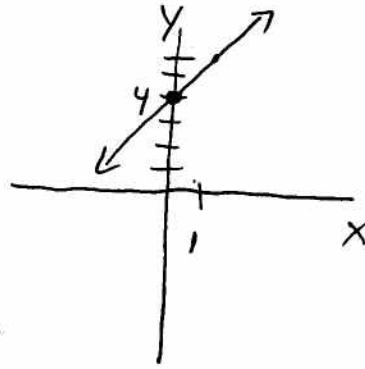


30.

$$y = 2x + 4$$

$$\text{Slope} = 2$$

$$y\text{-int} = (0, 4)$$



33.

$$x = 5 \rightarrow \text{vertical}, (-2, 4)$$

$$\text{Parallel } x = -2$$

$$\text{Perpendicular } y = 4$$

35.

x	f(x)
1	2
3	9
5	16

$$\text{Slope} = \frac{\text{rise}}{\text{run}} = \frac{7}{2}$$

$$y = mx + b$$

$$\frac{4}{2} = \left(\frac{7}{2}\right)(1) + b$$

$$-\frac{3}{2} = b$$

36.

x	y
2	-1
4	-4
6	-7

$$\text{Slope} = \frac{\text{rise}}{\text{run}} = \frac{-3}{2}$$

$$y = mx + b$$

$$-1 = 2\left(\frac{-3}{2}\right) + b$$

$$b = 2$$

* note typo on assignment

39.

Enter Into Calculator L_1 and L_2 STAT | EDIT Enter L_1 and L_2 STAT | CALC | LinReg L_1, L_2, Y_1

$$a = .30963$$

$$b = 20.81999$$

a)
$$y = .310x + 20.820$$

b) Slope ≈ 0.310 represents the change in weight in pounds per monthc) on calc, set Plots on
Zoom STATd) 2nd | CALC | Value | $x=30$
 ≈ 30 pounds

ON TI 33 or 34

40.

STAT / EDIT Enter Lists

Let 1980 = 0

1985 = 5 etc.

STAT / CALC / Lin Reg L_1, L_2, Y_1

a) $y = 1060.423x + 22089.491$

b) Slope = 1060.423 means
the change in compensation
per year in dollarsc) on calc zoom / STAT
after plots are ond) TABLESET / Independent Ask
TABLE / 20 \$ 43298

44

a) $\frac{-1}{.4} = -2.5^\circ$ per inch

b) $(1, 59) (2, 41) \Rightarrow -18^\circ$ per inch

c) $\frac{3}{.6} = 5^\circ$ inch

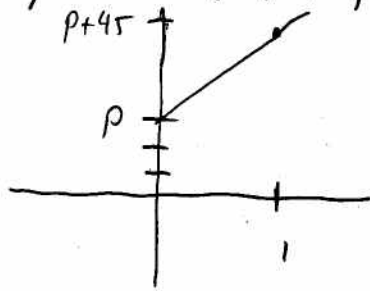
d) Fiberglass is the best, gypsum
is the worst insulator because
the change in temp per inch
is greater on fiberglass and smallest
on gypsum

6/6

46.

a) $d(t) = 45t$

b) $y = d(t) + p = 45t + p$



c) the slope is 45 it is the velocity of the car.

d) negative t values could represent time before the car arrives at point p .

e) If the car is at $d = 30$ (if when $t = 0$ then the y -int of $d(t)$ would be 30.