

1.1

21 | (0,0), (2,3)

$$m = \frac{3-0}{2-0} = \frac{3}{2}$$

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

$$2 \left(\frac{-3}{2}x + y \right) = (0) \cdot 2$$

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

22 | (1,1), (2,1)

$$m = \frac{1-1}{2-1} = \frac{0}{1} = 0$$

$$\boxed{y = 1}$$

$$0x + 1y = 1$$

42 | (a) g.w.

(0,70)

(4,68)

$$\frac{68-70}{4-0} = \frac{-2}{4} = -5\%$$

(b) f.i.

(4,68)

(4,10)

$$\frac{10-68}{4-4} = \frac{-58}{3.6} = -16.1\%$$

(c) w.s.

(4,10)

(4.7,5)

$$\frac{5-10}{4.7-4} = \frac{-5}{.7} = -7.1\%$$

$$\frac{1}{\sqrt{3}}$$

$$\frac{2}{6}$$

37 | A(-2,3), B(4,y), m = -2/3

$$m = \frac{y-3}{4-(-2)} = -\frac{2}{3}$$

$$6 \cdot \frac{y-3}{6} = -\frac{2}{3} \cdot 6$$

$$\begin{array}{r} y-3 = -4 \\ +3 \quad +3 \end{array}$$

$$y = -1$$

1.1

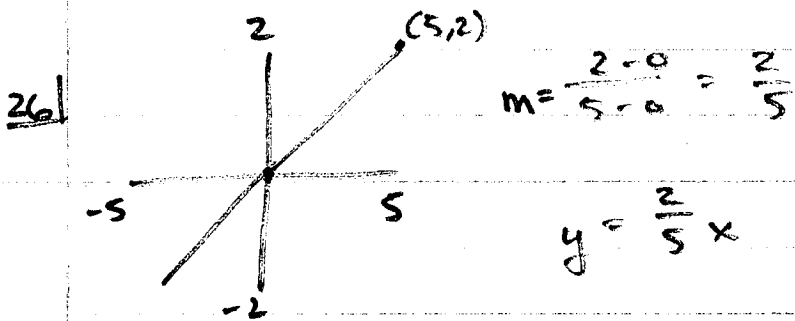
54 | $F = \frac{9}{5}C + 32 = C$ $F = C$

$\frac{9}{5}C + 32 = C$

$-\frac{4}{5}C + 32 = 0$

$-\frac{4}{5}C = -32$

$-40 = C$



43 | $p = kd + 1$ $d=0, p=1$ $p = .0994d + 1$

$10.94 = k(100) + 1$ $d=100, p=10.94$ $p = .0994(50) + 1$

$10.94 = 100k + 1$ $p = 5.97 \text{ atmospheres}$

$-1 \qquad -1$

$\frac{9.94}{100} = \frac{100k}{100}$

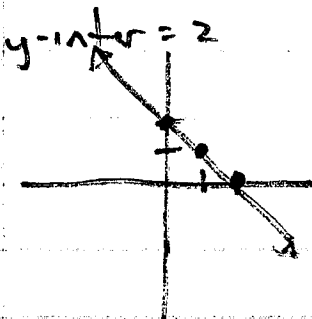
$.0994 = k$

28 | $x + y = 2$

$-x \qquad -x$

$y = -x + 2$

slope = -1

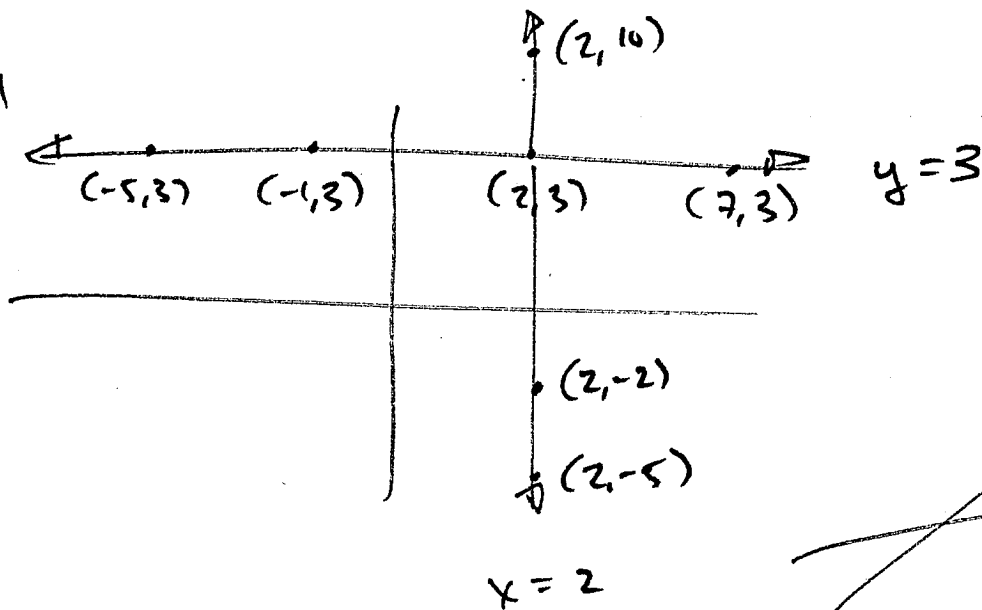


34 | $(-1, \frac{1}{2}), L = y = 3$

(a) $y = \frac{1}{2}$

(b) $x = -1$

1.1



32) $(-2, 2)$

$$\begin{array}{r} 2x + y = 4 \\ -2x \quad -2x \end{array}$$

(b) $m = \frac{1}{2}$

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

$$y = -2x + 4$$

$$m = -2$$

(a) $y - 2 = -2(x + 2)$ ✓

$$y = -2(x + 2) + 2$$
 ✓

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

$$y = -2x - 2$$
 ✓

$$2x + y = -2$$
 ✓