

1,1

(54) $F = \frac{9}{5}C + 32 \rightarrow F = \frac{9}{5}F + 32$

(a) $F = C$

$$-\frac{9}{5}F \quad -\frac{9}{5}F$$

$$-\frac{4}{5}F = 32 \cdot \frac{-5}{4}$$

$$F = -40$$

(25) $(0,0), (10,25)$

$$m = \frac{25-0}{10-0} = \frac{5}{2}$$

$$y - 0 = \frac{5}{2}(x - 0)$$

$$y = \frac{5}{2}x$$

(40) (a) $\frac{x}{c} + \frac{y}{d} = 1$

x-intercept: $\frac{x}{c} + \frac{0}{d} = 1$ y-intercept: $\frac{0}{c} + \frac{y}{d} = 1$

$$c \cdot \frac{x}{c} = 1 \cdot c$$

$$x = c$$

$$d \cdot \frac{y}{d} = 1 \cdot d$$

$$y = d$$

(b) $\frac{x}{c} + \frac{y}{d} = 2$

x-intercept: $c \cdot \frac{x}{c} = 2 \cdot c$ y-intercept: $d \cdot \frac{y}{d} = 2 \cdot d$

$$x = 2c$$

$$y = 2d$$

0.5-2

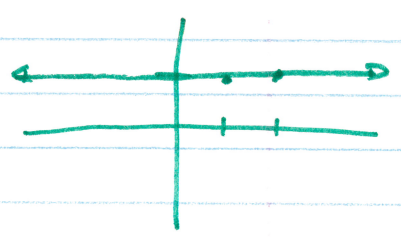
(22) $(1,1), (2,1)$

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

$$y - y = 0$$

$$+1 \quad +1$$

$$y = 1$$



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

$$\frac{0}{1}$$

$-\frac{2}{0}$

1.1

23) $(-2, 0), (-2, -2)$ $x = -2$

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

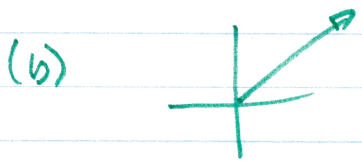
42) (a) $(0, 69^\circ), (4, 68^\circ)$ $m = \frac{68 - 69}{4 - 0} = -\frac{1}{4} = -0.25$

(b) $(4, 68^\circ), (4, 10^\circ)$ $m = \frac{10 - 68}{4 - 4} = -\frac{58}{0} = -\infty$

(c) $(4, 10^\circ), (4.6, 4^\circ)$ $m = \frac{4 - 10}{4.6 - 4} = -10$

(d) Fiber - best wall board - worst

44) (a) $y = 45x$



(c) 45 - speed in mph

36)

x	f(x)
2	-1
4	-4
6	-7

$(2, -1)$
 $(4, -4)$
 $(6, -7)$

$$m = \frac{-4 - -1}{4 - 2} = -\frac{3}{2}$$

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

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