

S/I means Slope Intercept

1) SLOPE

2) FUNCTION NOTATION

3) GRAPH $5x + 3y = 12$

method 1 - create a table

Method 2 - USE X+Y INTERCEPTS

METHOD 3 - USE SLOPE + Y-INTERCEPT

4) a) $3x + y = 6$ NOT S/I $\rightarrow y = -3x + 6$

b) $y = 5x + 2$ Yes S/I

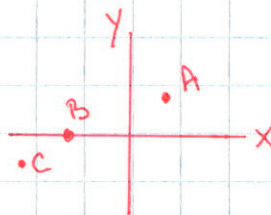
c) $x = 4y - 1$ NOT S/I $\rightarrow y = \frac{1}{4}x + \frac{1}{4}$

d) $y = -x + 6$ Yes S/I

5) A (3, 4) Q1

6) B (-5, 0) X-AXIS

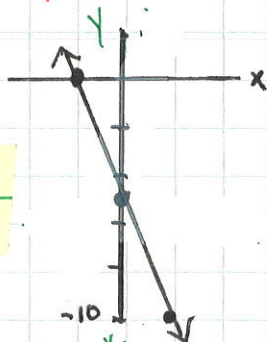
7) C (-7, -2) Q3



8) $y + 5x = -5$

$y = -5x - 5$

X	-1	0	1
Y	0	-5	-10



9) $2x + 3y = 9$

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

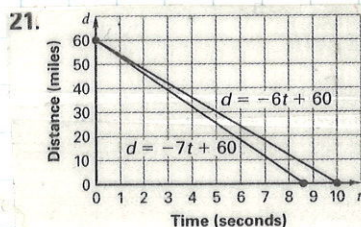
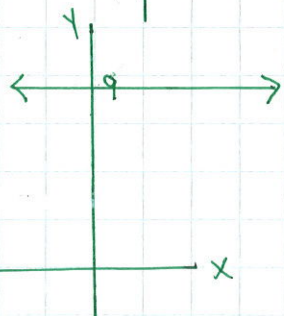
X	-3	0	3
Y	5	3	1



10) $2y - 14 = 4$

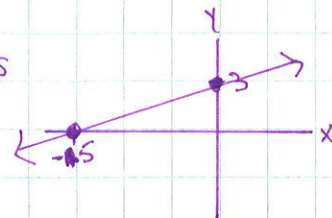
$y = 9$

X	-1	0	1
Y	9	9	9



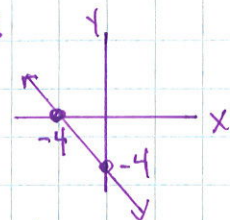
11) $-x + 5y = 15$

X: -15
Y: 3



12) $4x + 4y = -16$

X: -4
Y: -4



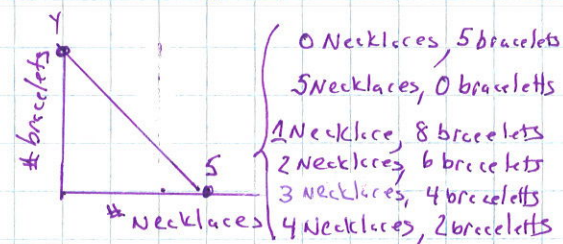
13) $2x - 6y = 18$

X: 9
Y: -3



14) $10N + 5B = 50$

B: 10
N: 5



15) (-1, 11) (2, 10)

$m = \frac{11-10}{-1-2} = \frac{1}{-3} = -\frac{1}{3}$

$m = -1/3$

16) (-2, 0) (4, 9)

$m = \frac{0-9}{-2-4} = \frac{-9}{-6} = \frac{3}{2}$

$m = 3/2$

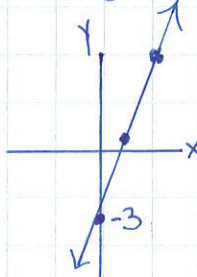
17) (-5, 4) (1, -8)

$m = \frac{4-(-8)}{-5-1} = \frac{12}{-6} = -2$

$m = -2$

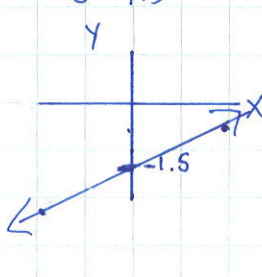
18) $4x - y = 3$

$y = 4x - 3$
 $m = 4/1$
 $B = -3$



19) $3x - 6y = 9$

$y = \frac{1}{2}x - 1.5$
 $m = 1/2$
 $B = -1.5$



20) $-3x + 4y - 12 = 0$

$y = \frac{3}{4}x + 3$
 $m = 3/4$
 $B = +3$

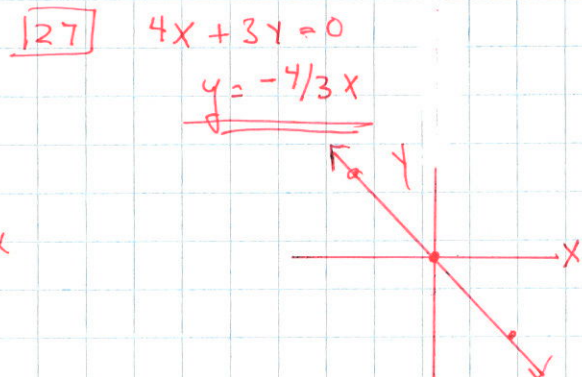
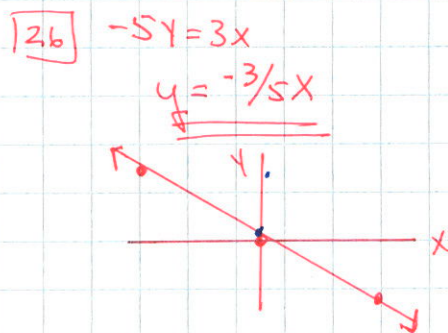
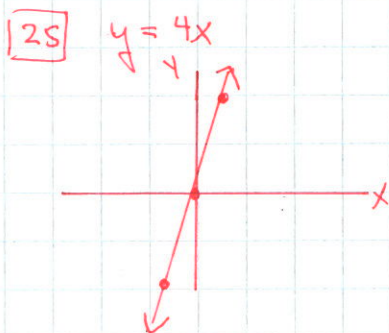


21) First runner finishes about 1.4 sec faster.

122 $x - y = 3 \rightarrow y = x - 3$ NOT DIRECT VARIATION

123 $x + 2y = 0 \rightarrow y = -\frac{1}{2}x$ Direct Variation $a(\text{constant variation}) = -\frac{1}{2}$

124 $8x - 2y = 0 \rightarrow y = 4x$ Direct Variation $a = 4$



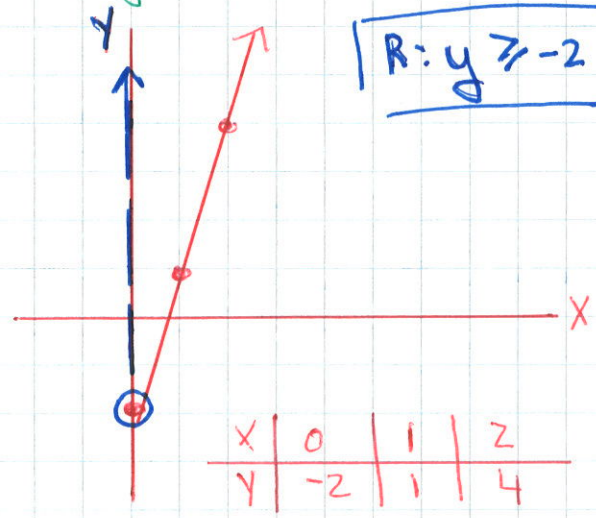
129 $g(x) = 2x - 3$
 $g(7) = 2(7) - 3$
 $g(7) = 11$

130 $h(x) = -\frac{1}{2}x - 7$
 $h(-6) = -\frac{1}{2}(-6) - 7$
 $h(-6) = -4$

(26)

$y = 3x - 2$ D: $x \geq 0$

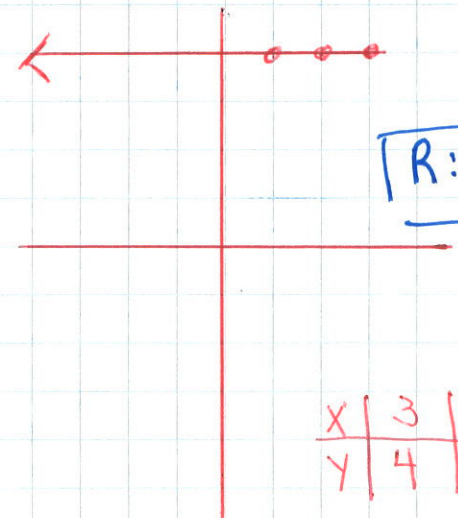
$R: y \geq -2$



(28)

$y = 4$ D: $x \leq 5$

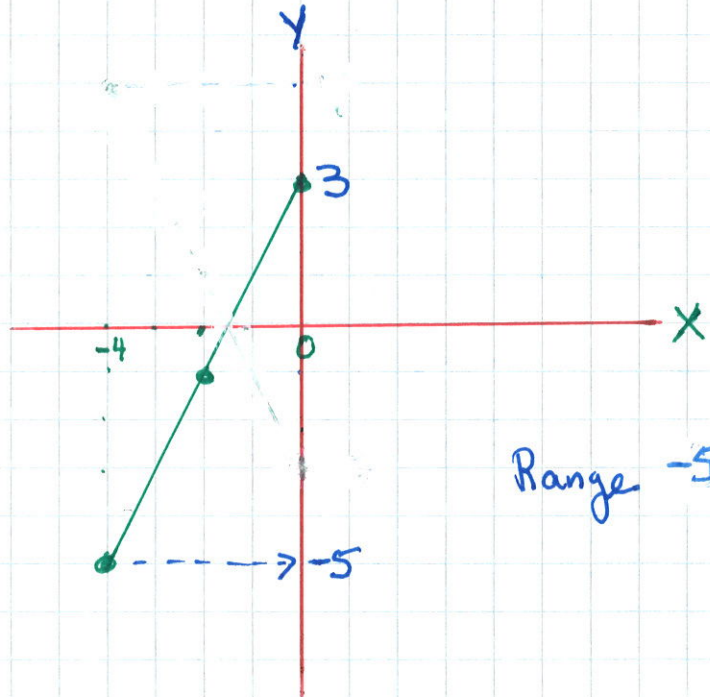
$R: y = 4$



(30)

$y = 2x + 3$ D: $-4 \leq x \leq 0$

x	-4	-2	0
y	-5	-1	3



Range $-5 \leq y \leq 3$

PG 941

#5 37-39

(37) $2x + y = 8$

$$\boxed{\begin{aligned} y &= -2x + 8 \\ m &= -2 \\ b &= 8 \end{aligned}}$$

(38) $\begin{array}{r} 10x - y = 20 \\ -10x \quad -10x \\ \hline y = -10x + 20 \\ -1 \quad -1 \quad -1 \end{array}$

$$\boxed{\begin{aligned} y &= 10x - 20 \\ m &= 10 \\ b &= -20 \end{aligned}}$$

(39) $\begin{array}{r} 5x + 2y = 10 \\ -5x \quad -5x \\ \hline \end{array}$

$$\frac{2y}{2} = \frac{-5x + 10}{2}$$

$$\boxed{\begin{aligned} y &= -\frac{5}{2}x + 5 \\ m &= -5/2 \\ b &= 5 \end{aligned}}$$