

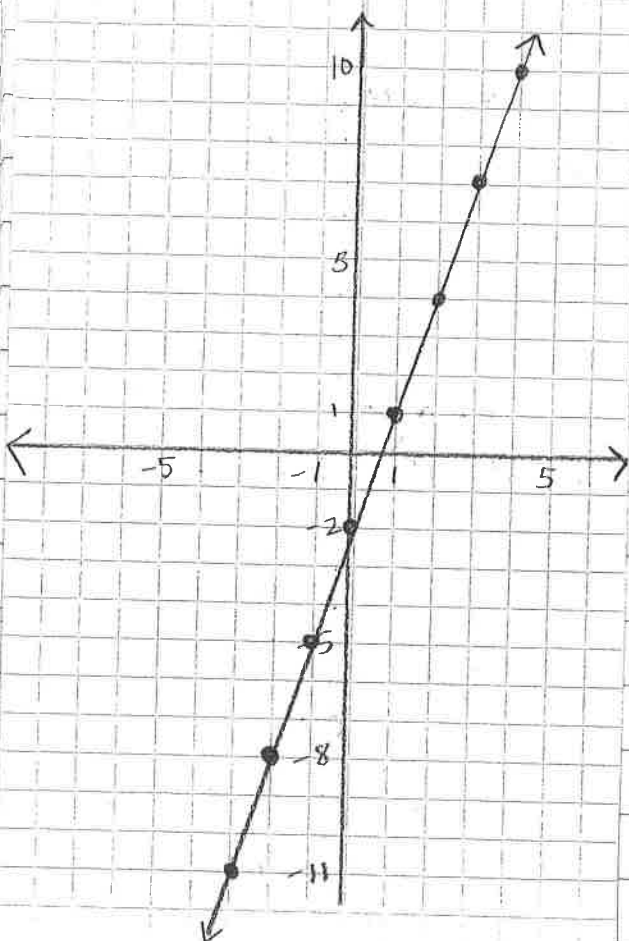
4.1.5

HWK

$$y = 3x - 2$$

4-44) Fig #

x	-4	-3	-2	-1	0	1	2	3	4
#tiles y	-14	-11	-8	-5	-2	1	4	7	10



$(-50, -152)$  Yes!

$$y = 3x - 2$$

$$y = 3(-50) - 2$$

$$y = -150 - 2$$

$$y = \underline{\underline{-152}}$$

$$-152 = 3(-50) - 2$$

4-45)

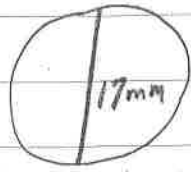
x	y
3	25
5	39
6	46
1	11

x	y
1	11
2	18
3	25
4	32
5	39
6	46
0	4

Fig #4 has 32 tiles  
 Fig #2 has 18 tiles  
 Fig 0 has 4 tiles

Rule is  $y = 7x + 4$   
 Growth factor is 7.

4-46)



Find area + circumference

$$17 \div 2 = 8.5 \text{ radius}$$

$$\begin{aligned}
 A &= \pi r^2 \\
 &= 3.14 \cdot (8.5)^2 \\
 &= 3.14 \cdot (72.25) \\
 &= 226.87 \text{ mm}^2
 \end{aligned}$$

$$\begin{aligned}
 \text{OR } A &= \pi \cdot (72.25) \\
 &= 226.98 \\
 &\text{(using } \pi \text{ button on calc.)}
 \end{aligned}$$

$$\begin{aligned}
 C &= \pi d \\
 &= 3.14 \cdot (17) \\
 &= 53.38 \text{ mm}
 \end{aligned}$$

$$\begin{aligned}
 \text{OR } C &= \pi (17) \\
 &= 53.41 \text{ mm} \\
 &\text{(using } \pi \text{ button)}
 \end{aligned}$$

4-47)

$$\begin{array}{c}
 \text{a)} \\
 \begin{array}{ccc}
 & 1 & \\
 \frac{1}{2} & \times & 2 \\
 & 2.5 & 
 \end{array}
 \end{array}$$

$$\begin{array}{c}
 \text{b)} \\
 \begin{array}{ccc}
 & 10 & \\
 -2 & \times & -5 \\
 & -7 & 
 \end{array}
 \end{array}$$

$$\begin{array}{c}
 \text{c)} \\
 \begin{array}{ccc}
 & 5 & \\
 -5 & \times & -1 \\
 & -6 & 
 \end{array}
 \end{array}$$

$$\begin{array}{c}
 \text{d)} \\
 \begin{array}{ccc}
 & -112 & \\
 8 & \times & -14 \\
 & -6 & 
 \end{array}
 \end{array}$$

$$\begin{array}{c}
 \text{48) a)} \\
 \begin{array}{l}
 -(5x+1) \\
 -5x-1
 \end{array}
 \end{array}$$

$$\begin{array}{c}
 \text{b)} \\
 \begin{array}{l}
 6x - (-5x+1) \\
 6x + 5x - 1 \\
 11x - 1
 \end{array}
 \end{array}$$

$$\begin{array}{c}
 \text{c)} \\
 \begin{array}{l}
 -(1-5x) \\
 -1 + 5x
 \end{array}
 \end{array}$$

$$\begin{array}{c}
 \text{d)} \\
 \begin{array}{l}
 -5x + (x-1) \\
 -4x - 1
 \end{array}
 \end{array}$$

4-49)

fig 0  
2



fig 1  
6



fig 2  
10

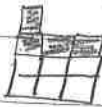


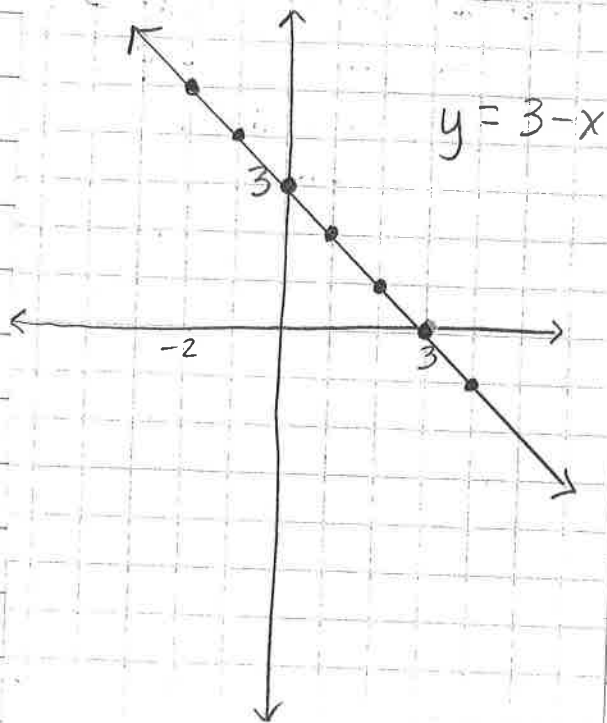
fig 3  
14



4-50)  $y = 3 - x$

a)

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



Pt (32, -29)?

$y = 3 - x$  Yes!

$$-29 = 3 - 32$$

$$-29 = -29$$

4-51)

a)  $3p - 7 + 9 - 2p = p + 2$  for  $y$

$$p + 2 = p + 2$$

$p$  can be any number

b)  $-2x + 5 + (-x) - 5 = 0$

$$-3x = 0$$

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

$$x = 0$$

$$c) 12 = r + 6 - 2r$$

$$12 = -r + 6$$

$$\frac{-6}{-6} \quad \frac{-6}{-6}$$

$$6 = -r$$

$$d) -(y^2 - 2) = y^2 - 5 - 2y^2$$

$$-y^2 + 2 = y^2 - 5 - 2y^2$$

$$-y^2 + 2 = -y^2 - 5$$

no solution

4-52)

$$a) \frac{x}{8} = \frac{3}{4} \quad (x=6)$$

$$b) \frac{2}{5} = \frac{x}{40} \quad (x=16)$$

$$c) \frac{1}{8} = \frac{x}{12}$$

$$\frac{12}{8} = \frac{8x}{8}$$

$$1.5 = x$$

$$\begin{array}{r} 1.5 \\ 8 \overline{) 12.0} \\ \underline{8} \phantom{0} \\ 40 \end{array}$$

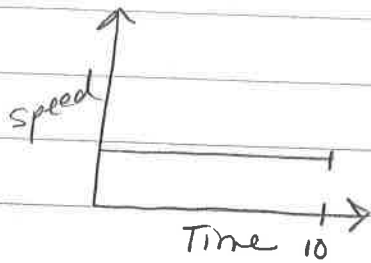
$$d) \frac{x}{10} = \frac{12}{15}$$

$$\frac{15x}{15} = \frac{120}{15}$$

$$x = 8$$

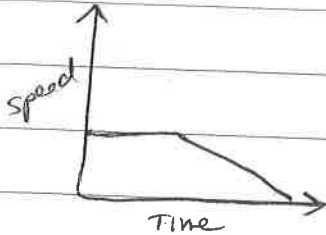
4-53)

a)



horizontal line with  
a positive  $y$  value  
that ends at  $x=10$

b)



line should start with  
pos.  $y$ -value and be horizontal  
then it should turn downward  
to the  $x$ -axis and stop

c)

