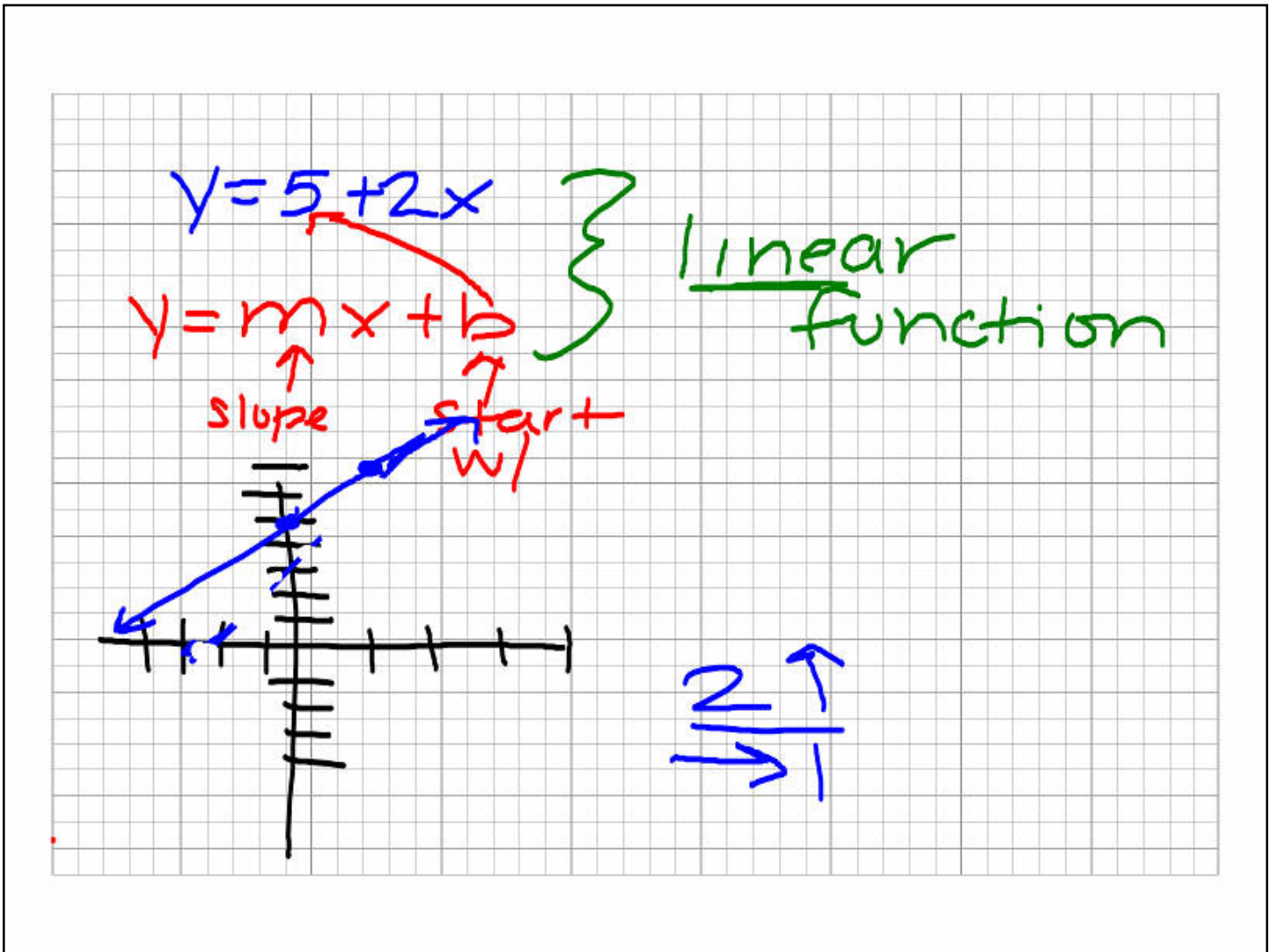


3-1 Constant Increase/Decrease Situations :

ex1 The current temp. is 5°C & has been increasing 2°C per hour. If this continues, what will the temp be in x hours? $5 + 2(3)$

x	temp	$y = 5 + 2x$
0	5	
1	$5 + 2 = 7$	
2	$5 + 2 + 2 = 9$	
3	$5 + 2 + 2 + 2 = 11$	✓



ex At the ^{start w/} beg of month, Kati bought a 50 lb bag of bird seed. She puts $\frac{2}{3}$ lb ^{slope/rate} into feeder each morning.

a) write equation in slope-intercept form.

~~$y = \frac{2}{3}x + 50$~~

$y = 50 - \frac{2}{3}x$

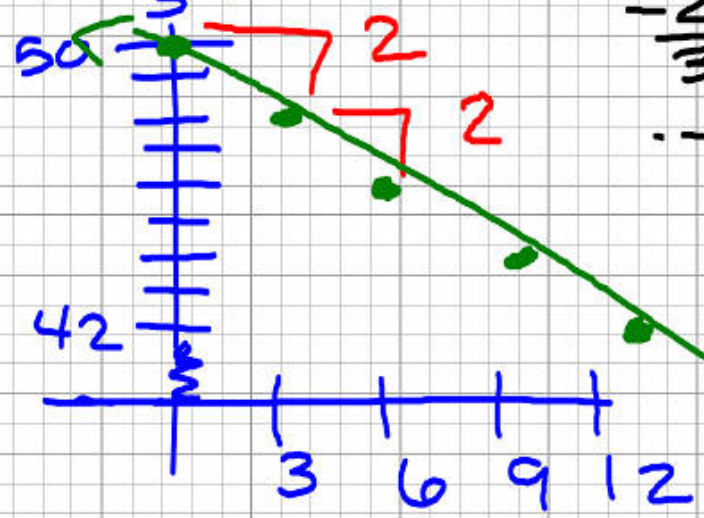
$y = -\frac{2}{3}x + 50$

b) graph

c) how long will the bag last?

b) graph

$$y = -\frac{2}{3}x + 50$$



$-\frac{2}{3} (\cdot 3) + 50$
 $= -2 + 50$
 $= 48$

$-\frac{2}{3} (\cdot 6) + 50$
 $= -4 + 50$
 $= 46$

$-\frac{2}{3} (\cdot 9) + 50$
 $= -6 + 50$
 $= 44$

$-\frac{2}{3} (\cdot 12) + 50$
 $= -8 + 50$
 $= 42$

$$Y = -\frac{2}{3}x + 50$$

$$0 = -\frac{2}{3}x + 50$$

$$-50 = -\frac{2}{3}x$$

~~$$-50 \cdot \left(-\frac{3}{2}\right) = -\frac{2}{3}x \cdot \left(-\frac{3}{2}\right)$$~~

$$x = 75$$