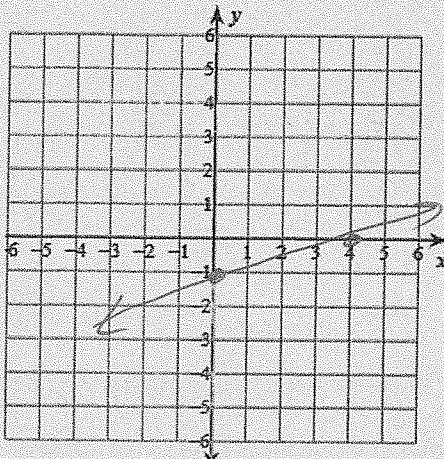
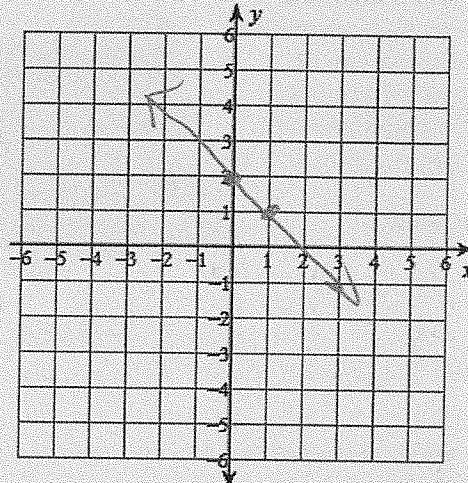


**DAY 9 - Graphing Lines using the Slope and Y-intercept**

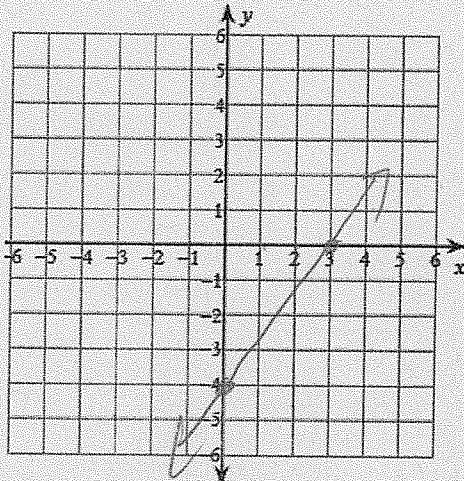
$$y = \frac{1}{4}x - 1$$



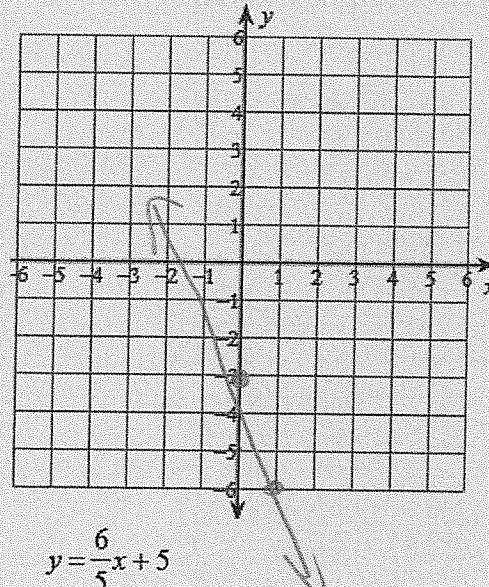
2.  $y = -x + 2$



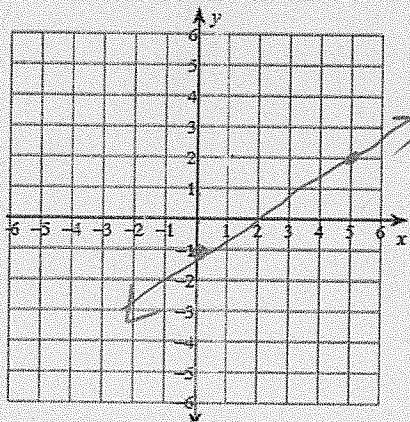
3.  $y = \frac{4}{3}x - 4$



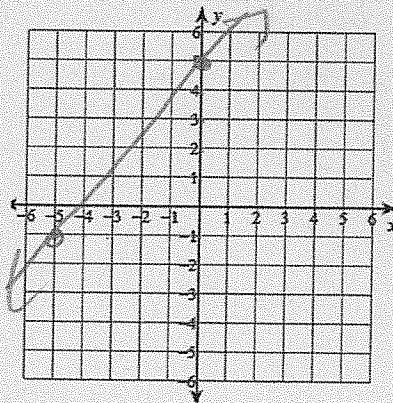
4.  $y = -3x - 3$



5.  $y = \frac{3}{5}x - 1$



6.  $y = \frac{6}{5}x + 5$

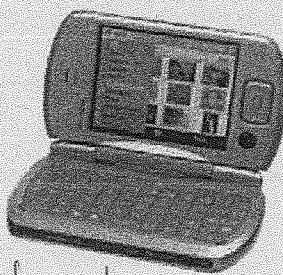


## Choosing a Scale for a Graph

1.

Since Jim is on the road a lot, he has a PDA phone with Internet access and a calling package that allows him to phone anywhere in North America. Jim paid \$575 for the phone and he pays \$55 per month for his Internet calling package.

a) Create a table of values

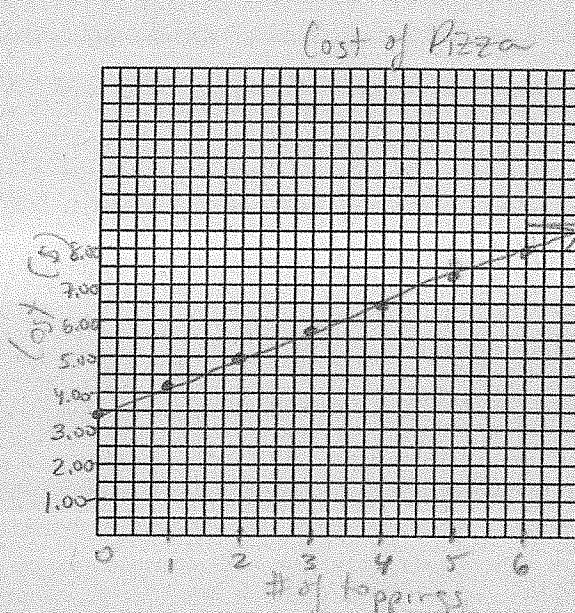
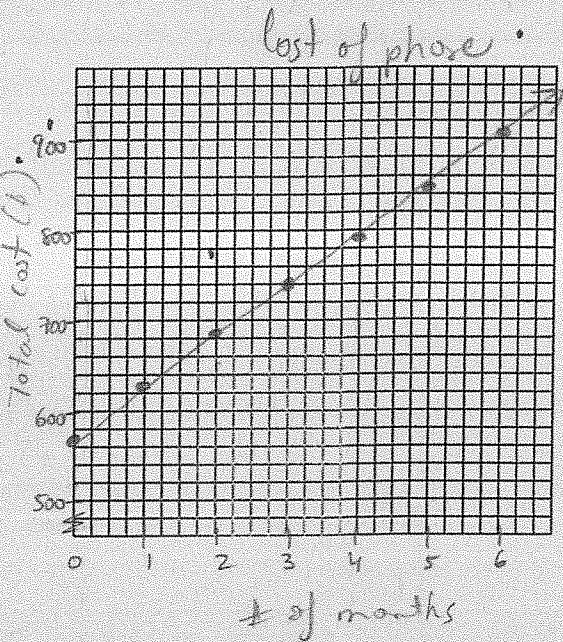


x # of months	0	1	2	3	4	5	6
y cost	575	630	685	740	795	850	905

b) Draw a graph of the total amount that Jim has spent for this special phone for one year.

c) What is the equation of the line that models the total cost?

let  $x$  be # of months  
let  $y$  be total cost  
 $y = 55x + 575$



$$\frac{905 - 575}{25 \text{ mo.}} = 13.2, \text{ round up } \frac{13.2}{1.5} = 9 \text{ mo.} = \frac{100}{\$55 \text{ mo.}}$$

$$\frac{258}{8\#} = 3.1, \text{ round down } \frac{256}{8\#}$$

8x2  
11