## Interpreting Linear Graphs

Mr. G is keeping track of how many flowers bloom in his garden. His data is below, with number of flowers (F) and the number of weeks (w). He wants to find an equation so he can predict how many flowers he will have!

|  | $\square$ |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  | 7 |
|  |  |  |  |  |  |  |  |
| $\begin{aligned} & -65 \\ & -60 \\ & -55 \end{aligned}$ |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
| $\begin{aligned} & -55 \\ & -50 \end{aligned}$ |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
| $\underline{\underline{L}}^{40}$ |  |  |  |  |  |  |  |
|  |  |  |  | $\square$ |  |  |  |
| $\begin{array}{ll} \frac{\pi}{ज} & 35 \\ \frac{1}{\omega} & 30 \\ 3 & 25 \\ 0 & \end{array}$ |  |  |  |  |  |  |  |
|  |  |  | , |  |  |  |  |
|  |  |  |  |  |  |  |  |
| $\pm \quad 20$ |  | $\square$ |  |  |  |  |  |
| $\begin{array}{r} 10 \\ -5 \end{array}$ |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
| 0 |  |  | - | 3 | 4 |  | 6 |
|  |  |  | eeks | (W) |  |  |  |

a) Find an equation for the number of flowers (F) related to the number of weeks (w).

Using the graph, we need to find:
Slope $=$ $\qquad$ $y$-intercept $=$ $\qquad$
Write the equation:
b) Check your equation (choose a point on the graph ( , )
c) Predict the number of flowers after 12 weeks


Write the equation:

Check your equation: ( , )

Write the equation:

Check your equation: ( , )


A: Write the equation

A: Check the equation ( , )

B: Write the equation

B: Check the equation ( , )

We call these 2 lines $\qquad$ , which means they have the same $\qquad$ but different
$\qquad$ .


Slope $=$ $\qquad$ $\mathbf{y}$-intercept $=$ $\qquad$ Write the equation:

Flat lines are called $\qquad$ lines. They have the same $\qquad$ value everywhere!

All $\qquad$ lines have a slope of $\qquad$ .


Straight up and down lines are called $\qquad$ lines. They have the same $\qquad$ value everywhere!

All $\qquad$ lines do not have a $\qquad$ or a $\qquad$ .

Homework: 4.2 \#9 (abcde)
4.3 \#1 (all), 2(right) 3 (all), 4-5 (right)

