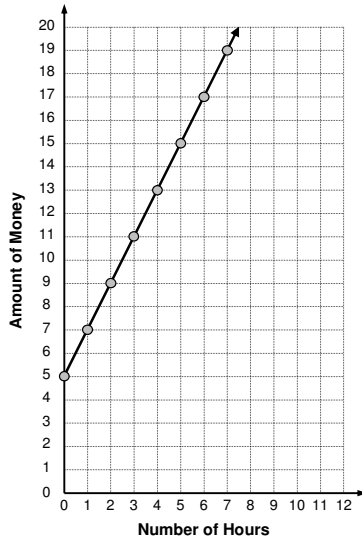


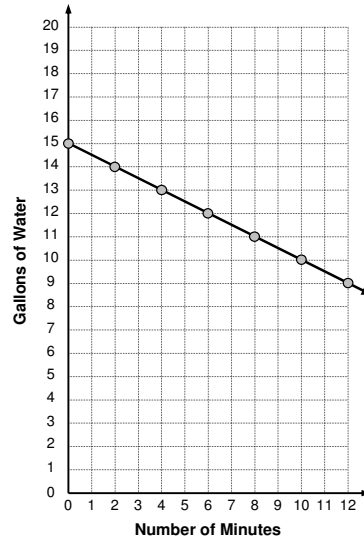
From Graphs to Equations: Classwork

Answer the following on your POD paper.

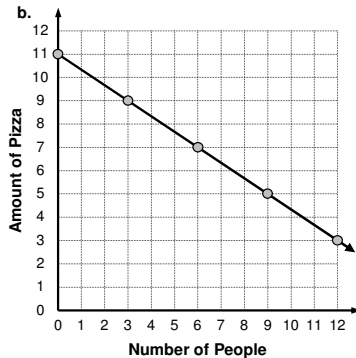
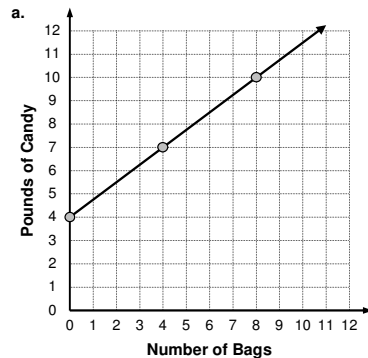
1. Use the graph to answer the following.
 - a. What was the starting amount?
Explain how you know.
 - b. What was the rate of change?
Explain how you know.
 - c. Write an equation that matches the graph.
State what each variable represents in the context of your story.
 - d. Write a story that matches the graph, then title the graph.



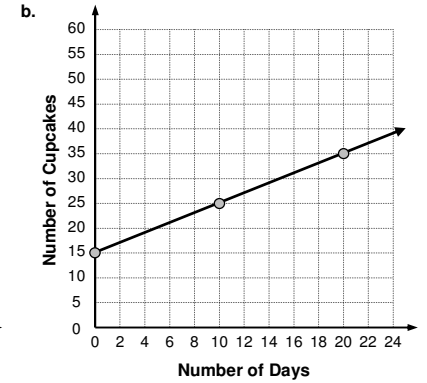
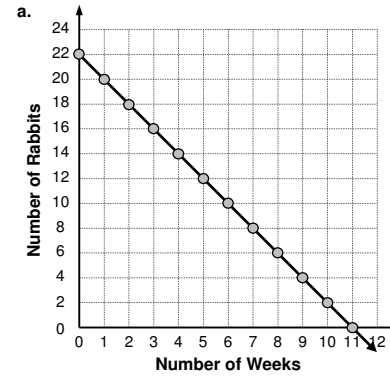
2. Use the graph to answer the following.
 - a. What was the starting amount?
Explain how you know.
 - b. What was the rate of change?
Explain how you know.
 - c. Write an equation that matches the graph.
State what each variable represents in the context of your story.
 - d. Write a story that matches the graph, then title the graph.



3. For each graph below:
 - Write a story that matches the graph, then title the graph.
 - Write an equation that matches the graph, and state what each variable represents in the context of your story.

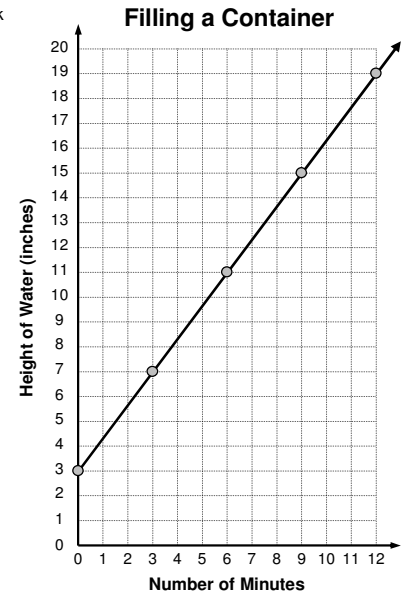


4. Be careful with these! For each graph below:
 - Write a story that matches the graph, then title the graph.
 - Write an equation that matches the graph, and state what each variable represents in the context of your story.



5. Garrett is filling a container with water. He kept track of the height of the water in the graph on the right.

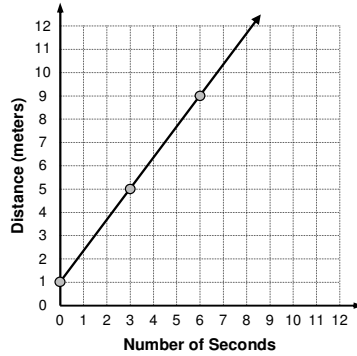
- a. Write an equation that matches the graph.
- b. Suppose you wanted to know the height of the water at 8 minutes.
Explain how you could estimate an answer using the graph.
Show how you could get an exact answer using your equation. Show your work.
- c. Suppose you wanted to know how long it would take to get the water height to 16 inches.
Explain how you could estimate an answer using the graph.
Show how you could get an exact answer using your equation. Show your work.



From Graphs to Equations: Homework

6. For the graph on the right.

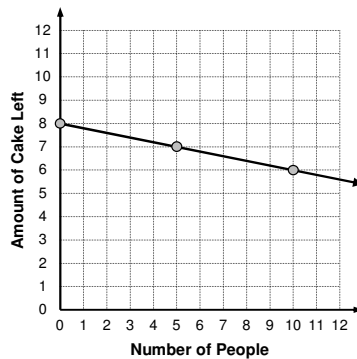
- a. Write a story that matches the graph, then title the graph.



- b. Write an equation that matches the graph.

7. For the graph on the right.

- a. Write a story that matches the graph, then title the graph.



- b. Write an equation that matches the graph.

8. Sally has 17 cups of sugar left in her cupboard. Her famous cookie recipe requires $\frac{2}{3}$ cup of sugar for each batch that she makes.

- a. Write an equation for the amount of sugar she has left s after any number of batches of cookies that she makes b .

- b. How many cups of sugar will she have left after 9 batches of cookies? Use your equation to show how you know. Show your work.

- c. After how many batches of cookies will Sally be left with just 3 cups of sugar? Use your equation to show how you know. Show your algebra work.