Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Sect \_\_\_\_\_\_\_\_\_\_\_\_\_\_

To rent a boat at the lake, Wanda needs to pay a flat fee of $20 plus $5/hour. This is represented by the linear equation y = 5x + 20, with y = total cost and x = hours. Draw a graph of what this linear equation would look like.



What is the y-intercept of this line?

What is the slope of this line?

How much would it cost if Wanda rented the boat for 6 hours?

How many hours would Wanda have rented the boat for if she paid $75?

A 1200-gallon water tank can be emptied at the rate of 150 gallons an hour. This is represented by the linear equation y = -150x + 1200, with x = hours and y = gallons in tank. Draw a graph of what this linear equation would look like.



What is the y-intercept of this line?

What is the slope of this line?

How many hours will it take for the tank to empty?

After 7 hours, how much water is left in the tank?

Darnell joins a book-of-the-month club which costs $2/month plus $1 for every book he orders. Last month he ordered 7 books and paid $9. The previous month he ordered 9 books and paid $11.

Write a linear equation for this scenario, with x = the number of books, and y = total cost.

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What is the slope of this line?

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What is the y-intercept of this line?

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Graph what this equation would look like.



Gabe’s Gizmos is a manufacturing that company that makes Gizmos for technology applications. If the company makes 80 gizmos a day, it incurs costs of $1100. If the company makes 60 Gizmos a day, it incurs costs of $900.

Calculate the slope of the line that represents this scenario:

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What is the y-intercept?

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Write a linear equation for this scenario, with x = #gizmos manufactured, and y = costs.

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Graph what this equation would look like:



If the company made 350 gizmos, how much cost would the company incur?

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