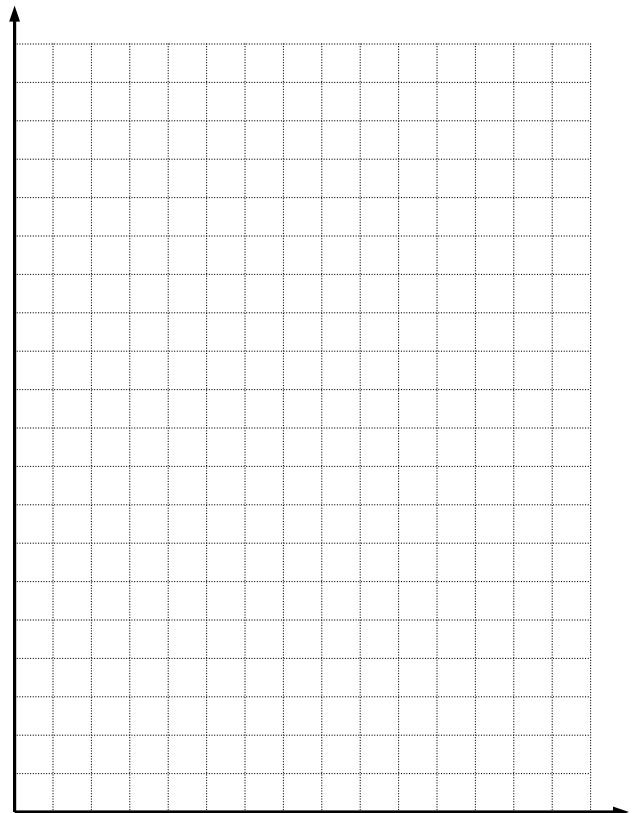


## More Linear Relationships: Classwork

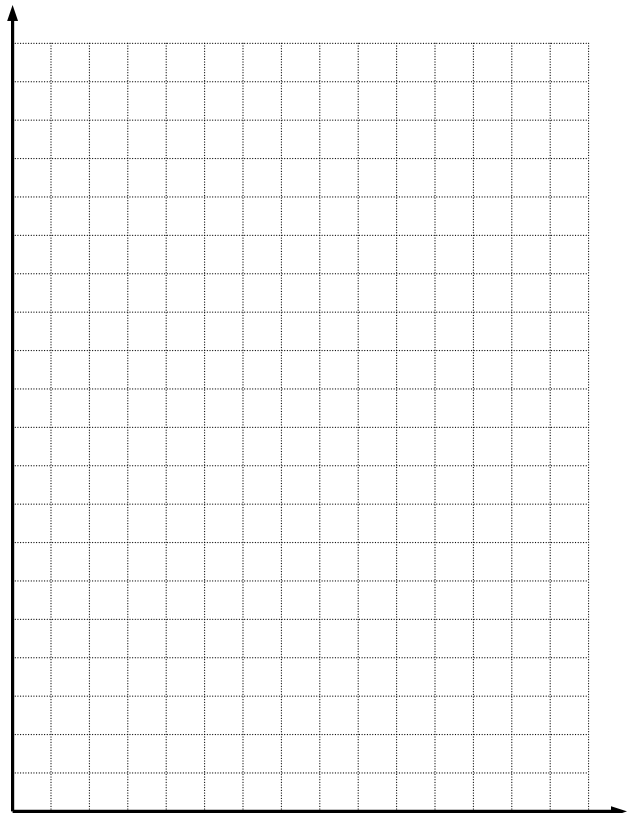
1. Penny needs to rent a car for today. She has the following choices.
  - Speedy Rental charges a \$26 fee and then \$3 per hour.
  - Discount Rental charges \$7 per hour and no additional fee.
  - a. Complete the table to show the total cost for each company after each of the first ten hours.
  - b. Identify the dependent variable and independent variable. Explain how you know which is which.
  - c. Write an equation for each plan. State what each variable represents.
  - d. What do the slopes represent in the context of the story? The  $y$ -intercepts?
  - e. Make a graph for the situation. Be sure to label your axes and title the graph!

Hours	Speedy's Cost	Discount's Cost
0		
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		



2. Leonard and Sheldon just got some birthday money and plan to spend it at the comic book store everyday. Leonard currently has \$200, but plans to spend \$6 each day. Sheldon currently has \$170, but plans to spend \$4 each day.
  - a. Complete the table to show how much money they will have left after each of their next ten visits.
  - b. Identify the dependent variable and independent variable. Explain how you know which is which.
  - c. Write an equation for each person. State what each variable represents.
  - d. What do the slopes represent in the context of the story? The y-intercepts?
  - e. Make a graph for the situation. Be sure to label your axes and title the graph!
  - f. When will they have the same amount of money? When will Sheldon have more money than Leonard? Explain how you know.

Visit	Leonard's Money	Sheldon's Money
0		
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		



## More Linear Relationships: Homework

3. Howard is planning to purchase some t-shirts online. The shirts cost \$4 each, but there is a \$9 shipping fee.

- Complete the table to show the total cost after each of the first ten shirts.
- Identify the dependent variable and independent variable. Explain how you know which is which.
- Write an equation for the situation. State what each variable represents.
- What does the slope represent in the context of the story? The  $y$ -intercept?

Number of Shirts	Total Cost
0	
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	

4. Raj is trying to lose weight. He currently weighs 225 pounds, but finds that with exercise and the right diet, he can safely lose 2 pounds per week.

- Complete the table to show his weight after each of the first ten weeks.
- Identify the dependent variable and independent variable. Explain how you know which is which.
- Write an equation for the situation. State what each variable represents.
- What does the slope represent in the context of the story? The  $y$ -intercept?

Weeks	Weight
0	
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	