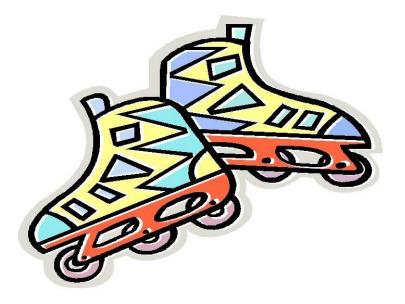
Name:

## Planning a Skate Party

Suppose your class is planning a skating party to celebrate the end of the school year. Your committee is in charge of finding a place to rent in-line skates for a reasonable price. You get quotes from two companies:

Roll-Away Skates charges \$5 per person Wheelie's Skates and Stuff charges \$20 plus \$4 per person

Which company would you choose if you want to keep the cost to a minimum? Explain how you made your choice.



## Do Now:

A child walks at the speed of 300 feet per minute. If the child walks for 7 minutes, how far has the child walked?

Solve the question by making a table comparing the time to the distance walked and then graph your result. Lastly, make a linear equation that could represent this question.

## **Follow-up Activities and Questions:**

- 1. Graph the equations for both companies
- 2. a. On which graph is the point (8,40)? What does this point mean in terms of the cost to rent skates?
  - b. On which graph is the point (8,60)? What does this point mean in terms of the cost to rent skates?
  - c. Find the point of intersection of the two graphs. What does this point mean in terms of the cost to rent skates?
- 3. If you write a linear equation in the form y=mx+b, the y-intercept (0,b).
  a. Find the y-intercepts for the equations you graphed in question 1
  b. What do the y-intercepts mean in terms of the cost to rent skates?
- 4. What are the coefficients of x in the equations in question 1? What do these coefficients mean in terms of the cost to rent skates? What effect do the coefficients have on the graph?
- 5. Which company would you choose if 100 students are planning to attend the party? Why?
- 6. If your budget for skate rental is \$250, how many pairs of skates can you rent from each company?