

# Fund Raising

Name \_\_\_\_\_

The Middle Grades Math Club needs to raise money for its spring trip to Washington, D.C., and for its Valentine's Day dance. The club members decided to have a car wash to raise money for these projects. The club treasurer provided the following information:

- The total cost of sponges, rags, soap, buckets, and other materials needed will be \$117.50.
- The usual charge for washing one car is \$4.00.

As a member of the club, your job is to produce a mathematical analysis of this situation that includes making a table and a graph to answer the following questions:

1. How much money would the club raise if the members washed 0, 1, 2, 3, or 4 cars? \_\_\_\_\_

\_\_\_\_\_ 10 cars? \_\_\_\_\_ 50 cars? \_\_\_\_\_ 100 cars? \_\_\_\_\_

How can you use your table to answer these questions? \_\_\_\_\_

How can you use your graph to answer these questions? \_\_\_\_\_

2. (a) If no cars are washed, what happens to the club's finances? How is this situation shown on the graph? \_\_\_\_\_ On the table? \_\_\_\_\_

(b) With every car washed, what is the change in the amount of money earned? \_\_\_\_\_

How is this change shown on the graph? \_\_\_\_\_ On the table? \_\_\_\_\_

(c) Write a general rule to use to determine how much money is raised for any number of cars.

How is the information you identified for parts (a) and (b) related to the rule you wrote?

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3. How many cars must the members wash to "break even"? \_\_\_\_\_

4. How many cars must the members wash to raise enough money for—

• The trip to Washington—estimated cost, \$875? \_\_\_\_\_

• The Valentine's Day dance—estimated cost, \$350? \_\_\_\_\_

5. Realistically, can the car wash raise enough money for both of these activities? \_\_\_\_\_

Explain why or why not. \_\_\_\_\_

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