

EXPLORATION 1.3 **Budgeting Expenses**

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**PART 1: How much will you spend on gasoline this year?**

A problem most people face every day is figuring out whether they can afford something. Imagine that you are thinking of buying a car. Select one person in your group who has a car and use data about that person's car to determine how much that person will spend on gasoline in one year.

1.
  - a. Brainstorm the information you need to have in order to answer this question.
  - b. Select the information that you all agree needs to be collected and briefly explain why each piece of information is necessary to answer the question.
  - c. Decide how you can get that information. Briefly explain the reasoning behind each decision.
  - d. Decide how accurate your information needs to be. That is, if the actual amount were \$10 different from your estimate, would that be accurate enough? What if it were \$100 different? Briefly explain your reasoning.
2. Using the data that you have at your disposal, determine how much the person should budget for gasoline per month. Prepare a presentation of your solution that includes your work on Steps 1(b)–1(d).
3. Listen to other groups' presentations.
  - a. What assumptions did other groups make that were similar to your group's assumptions?
  - b. What assumptions did they make that were different?
  - c. How did different assumptions affect the answers that groups came up with?

**PART 2: How much does it cost to own a car?**

As in Part 1, select one person's car and personal data to determine how much it costs that person to own a car for a year. If no one in your group has a car, select one person to "buy" a car, and then determine how much it would cost, per year, for that person to own the car.

1.
  - a. Brainstorm the information you need to have in order to answer this question.
  - b. Select the information that you all agree needs to be collected and briefly explain why each piece of

