

# 42

# Multistep Problems

SOL 6.8 6.18.a

## Example

Harold has a budget of \$2,750 per month. The table shows his main expenses.

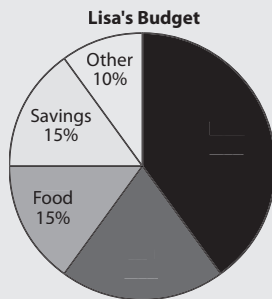
Category	Amount
Mortgage	\$1,275
Car Payment	\$350
Food	\$250
Car Expenses	\$125

Harold spends  $\frac{2}{3}$  of what is left after his main expenses on everything else and saves the rest. How much will he save each month?

- (A) \$250
- (B) \$500
- (C) \$750
- (D) \$915

## Example

Lisa's monthly budget is \$1,500. How much *more* money does she budget for rent than for food?



- (A) \$300
- (B) \$375
- (C) \$450
- (D) \$500

## Thinking It Through

**Ask** *What part of Harold's expenses do I know?* Add the amounts in the table:  $\$1,275 + \$350 + \$250 + \$125 = \$2,000$

*What do I need to do to find how much Harold will save?* Harold will save  $\frac{1}{3}$  of what is left, which is  $\$2,750 - \$2,000 = \$750$ .

Multiply  $\frac{1}{3} \times \$750 = \$250$ , answer A.

**Assemble** Sometimes you will encounter multiple questions on the same data. You could complete the table in order to answer other potential questions.

Harold's Budget

Category	Amount
Mortgage	\$1,275
Car Payment	\$350
Food	\$250
Car Expenses	\$125
Other Expenses	\$500
Savings	\$250

## Thinking It Through

**Ask** *What do I know?* Lisa has a budget of \$1,500. She spends 40% of her money on rent and 15% on food. *What percent more does Lisa spend for rent than for food?*  $40\% - 15\% = 25\%$

Multiply  $25\% \times \$1,500$ . Convert 25% to the fraction  $\frac{1}{4}$  and divide  $\$1,500 \div 4 = \$375$ , answer B.

## Review

A **budget** is a plan for spending. Budgets can be presented in charts, bar graphs, or circle graphs.

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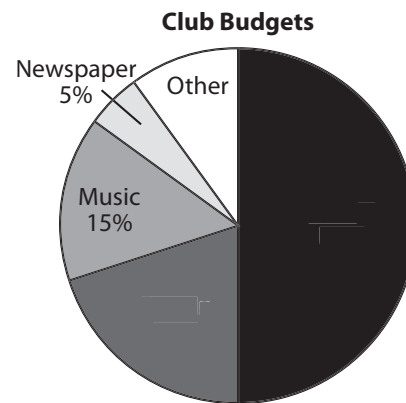
**DIRECTIONS** Read and solve each question. Then circle the letter of the best answer.

Use the information to answer questions 1 and 2.

Four friends are saving for a \$3,500 vacation that they plan to take together. Tamika has saved  $\frac{1}{4}$  of the money needed, Claudia has saved \$700, Marisa has saved 0.3 of the money. Rose is responsible for the remaining money.

- Who will contribute the most money to this vacation?
  - Claudia
  - Marisa
  - Rose
  - Tamika
- How much money is Rose responsible for?
  - \$700
  - \$750
  - \$825
  - \$875

Use the circle graph to answer questions 3 and 4.



- If the total budget for the clubs is \$7,500 for the year, how much *more* money will be spent on sports clubs than on the music club?
 

A \$2,625	C \$3,750
B \$3,000	D \$4,875



You may not need all of the information in a graph for any one question. Ignore unnecessary information.

- The money for the Other category was spent in equal increments over a 5-month period. If the total budget for the year was \$7,500, how much money was spent on the Other category per month for that 5-month period?
 

F \$100	H \$150
G \$125	J \$200