

## Preparing a Budget

**EXAMPLE**

In one week Carlos had take home pay of \$1,246.16. He spent \$311.54 for food for his family of six. What percent of his income did Carlos spend for food?

**Step 1** Divide the food expense by Carlos' take-home pay.

$$\begin{array}{r} .25 \\ 1246.16 \overline{) 311.54} \end{array}$$

Carlos spent 25% of his take-home pay for food.

**Step 2** Write the decimal as a percent.

$$.25 = 25\%$$

**Directions** Solve the following problems. Round your answers to the nearest percent or nearest cent.

- Jason spends \$240.00 on rent out of a monthly income of \$857.14. What percent of his monthly income did Jason spend on rent?
- Arielle spends \$15.80 on transportation in a week. What percent of her weekly paycheck of \$131.67 goes to transportation costs?
- Dagmar brings home \$3,000 monthly. Her food bills are \$540 in a month. What percent of her monthly income is spent for food?
- Jennifer plans to spend 5% on insurance. How much is allowed in a budget of \$450?
- Griffith puts away \$180 from his monthly take home pay of \$2,000. What percent does he save?
- Rachel spent \$150.00 one month on clothing. Her total budget of \$1,740.00 included 9% for clothes. Did she spend within her budget? How do you know?
- Hailey saved \$1,200 in a given year. What percent of her annual take home pay of \$25,300 was saved?
- Logan purchased 12 DVD titles for a total of \$324.96 in a year. His annual budget of \$27,080.00 provides for an entertainment allowance of 5%. What percent did Logan spend on the DVDs?
- Challenge: How much was left over in Logan's entertainment budget for other forms of entertainment that year?



## Using Circle Graphs

**EXAMPLE** Jon's automotive budget provides for a \$225 car payment, \$80 for fuel, and \$25 for general maintenance. Draw a circle graph to show the percent budgeted in each category.

**Step 1** Find the total amount of his budget.

$$\begin{array}{r} \$225 \\ 80 \\ + 25 \\ \hline \$330 \end{array}$$

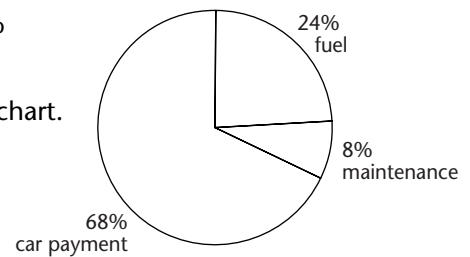
**Step 3** Find the degrees for each category.

$$\begin{array}{l} 68\% \times 360 = 245^\circ \\ 24\% \times 360 = 86^\circ \\ 8\% \times 360 = 29^\circ \end{array}$$

**Step 2** Find the percent in each category.

$$\begin{array}{l} 225 \div 330 = 68\% \\ 80 \div 330 = 24\% \\ 25 \div 330 = 8\% \end{array}$$

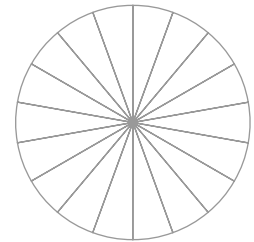
**Step 4** Draw the circle chart.



Check that the degrees total 360. Some error may occur due to rounding.

**Directions** Draw circle graphs for each problem. Each chart is marked in 20 degree sections. Draw in your own lines to show your answers.

- Brian's monthly insurance budget covers \$5 life insurance, \$25 health insurance and \$150 renters insurance, and \$100 auto insurance. Draw a circle graph to show the percent budgeted in each category.



- Sylvia is saving \$5 per week of her food budget to buy her china service. She also budgets \$115 for groceries, \$35 for lunches at work, and \$25 for paper goods. Draw a circle graph to show how much is budgeted for each category.

