Lesson 7-1

Example 1 Find the Percent of a Number
Find 8% of 200.

To find 8% of 200, you can use either method.

Method 1 Write the percent as a fraction.

$8\% = \dfrac{8}{100}$ or $\dfrac{2}{25}$

$\dfrac{2}{25}$ of $200 = \dfrac{2}{25} \times 200$ or 16

Method 2 Write the percent as a decimal.

$8\% = \dfrac{8}{100}$ or 0.08

0.08 of $200 = 0.08 \times 200$ or 16

So, 8% of 200 is 16.

Example 2 Use Percents Greater Than 100%
Find 160% of 18?

Method 1 Write the percent as a fraction.

$160\% = \dfrac{160}{100}$ or $1\dfrac{3}{5}$

$1\dfrac{3}{5}$ of $18 = 1\dfrac{3}{5} \times 18$

$\qquad\qquad = \dfrac{8}{5} \times \dfrac{18}{1}$ or $\dfrac{144}{5}$ or 28.8

Method 2 Write the percent as a decimal.

$160\% = \dfrac{160}{100}$ or 1.6

1.6 of $18 = 1.6 \times 18$ or 28.8

So, 160% of 18 is 28.8.

Example 3 Find the Percent of a Number
SURVEYS A survey shows that 28% of 1,250 people surveyed prefer vanilla ice cream over chocolate or strawberry. How many of the people surveyed prefer vanilla ice cream?

To find 28% of 1,250, write the percent as a decimal. Then multiply.

$$28\% \text{ of } 1{,}250 = 28\% \cdot 1250$$
$$= 0.28 \cdot 1250$$
$$= 350$$

So, 350 of the people surveyed prefer vanilla ice cream.