4.3

Percent of a Number

MathLinks 8, pages 138-143

Key Ideas Review

- 1. Label each example with the mental math strategy it represents: halving, doubling, or dividing by ten. Then, complete the calculation.
 - a) 1% of \$66

$$10\%$$
 of $$66 = 6.60

b) 5% of 180

$$10\%$$
 of $180 = 18$

c) 20% of \$3.20

$$10\%$$
 of $$3.20 = 0.32

2. Circle the terms that correctly complete this statement.

To calculate the percent of a number, write the percent as a (decimal/fraction), and then (divide/multiply) by the number.

Practise and Apply

- **3.** Use mental math to determine each of the following. Show your thinking.
 - a) 200% of 4500

d) 30% of 70

b) 0.1% of 600

e) $\frac{4}{5}$ % of 15

c) $1\frac{1}{4}\%$ of 80

f) 450% of 300

- **4.** What is the percent of each number? Give your answer to the nearest hundredth.
 - a) $\frac{1}{5}$ % of 630
 - **b)** $23\frac{7}{8}\%$ of 300
 - c) 245% of \$356.80
 - **d)** $68\frac{3}{4}\%$ of 730
 - **e)** 360% of \$129.95
- 5. The commission for the sale of a house was $6\frac{3}{4}$ %. If the house sold for \$345 000, how much was the commission? Show your thinking.
- 6. Table salt is a chemical compound of sodium and chlorine. Recommended daily intake is about 1700 mg. If Canadians consume 182% of this amount on average, how much sodium is one person eating daily?

- 7. Estimate the following answers, then calculate. Show your thinking.
 - a) Miguel bought a car for \$4700. He made a down payment of $19\frac{1}{2}$ %. How much was the down payment?



- **b)** About 5.6% of Canadians have Type 2 diabetes. If Canada's population is 32 million, about how many Canadians have this condition?
- c) The 4900-seat hockey arena was 63% full. How many people were at the game?
- 8. The Nile River is about 209% the length of the Yukon River. If the Yukon River is 3168 km, how long is the Nile River (to the nearest km)? Show your work.

