

## 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

$$10\% \text{ of } \$66 = \$6.60$$

$$\text{So, } 1\% \text{ of } 66 = \$ \boxed{\phantom{00}} \text{-----}$$

b) 5% of 180

$$10\% \text{ of } 180 = 18$$

$$\text{So, } 5\% \text{ of } 180 = \boxed{\phantom{00}} \text{-----}$$

c) 20% of \$3.20

$$10\% \text{ of } \$3.20 = \$0.32$$

$$\text{So, } 20\% \text{ of } \$3.20 = \$ \boxed{\phantom{00}} \text{-----}$$

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

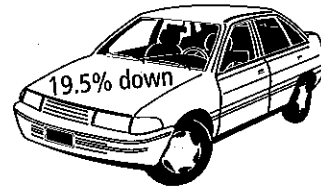
e) 360% of \$129.95

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.

