

What Should I Be Able to Do?

LESSON

- 3.1** 1. Write each fraction as a decimal.

Identify each decimal as terminating or repeating.

a) $\frac{3}{5}$ b) $\frac{5}{6}$ c) $\frac{3}{8}$ d) $\frac{3}{20}$

2. Write each decimal as a fraction or a mixed number in simplest form.

a) 0.55 b) $1.\bar{3}$
c) 0.8 d) $0.\overline{07}$

- 3.2** 3. a) Use any method. Order these numbers from least to greatest. Explain the method you used.

$\frac{5}{4}$, $1\frac{1}{16}$, $\frac{3}{6}$, 1.1, $\frac{5}{8}$

- b) Use a different method to order the numbers, to verify your answer in part a.

4. In each ordered set, identify the number that has been placed incorrectly. Explain how you know.

a) $2\frac{1}{3}$, 2.25, $\frac{17}{6}$, $2\frac{11}{12}$

b) $\frac{3}{5}$, $\frac{9}{10}$, $\frac{21}{20}$, $1\frac{3}{15}$, 1.1

- 3.3** 5. Two decimals have a sum of 3.41. What might the decimals be? Find as many answers as you can.

6. Asafa Powell of Jamaica holds the men's world record for the 100-m sprint, with a time of 9.77 s. Florence Griffith Joyner of the United States holds the women's world record, with a time of 10.49 s. What is the difference in their times?

- 3.4** 7. Kiah works at the library after school. She earns \$7.65/h. She usually works 15.5 h a week.

- a) What does Kiah earn in a week? Use estimation to check your answer.

- b) One week Kiah only works one-half the hours she usually works. What are her earnings that week?



8. Lok needs 1.2 m of fabric to make a tote bag. He finds two fabrics he likes. One fabric costs \$7.59/m and the other fabric costs \$6.29/m. How much money will Lok save if he buys the less expensive fabric?

- 3.5** 9. Estimate.

Which quotients are:

- i) greater than 100?
ii) less than 50?

Calculate the quotients that are less than 50.

- a) $259.8 \div 1.65$
b) $35.2 \div 0.2$
c) $175.08 \div 0.8$
d) $93.8 \div 22.4$
e) $162.24 \div 31.2$
f) $883.3 \div 36.5$

LESSON

- 10.** The area of a rectangle is 3.75 m^2 . Its length is 0.6 m . What is the width of the rectangle?

3.6 11. Evaluate.



Use the order of operations.

- a) $8.11 + 6.75 \times 5.6 - 2.12$
b) $3.78 \times 2.25 - 4.028 \div 1.52$

12. a) Simplify.

- i) $1.2 + 2.8 \times 2.1 + 3.6$
ii) $1.2 \times 2.8 + 2.1 \times 3.6$
iii) $1.2 \times (2.8 + 2.1) + 3.6$
iv) $1.2 + 2.8 + 2.1 \times 3.6$

- b) All the expressions in part a have the same numbers and operations. Why are the answers different?

- 3.7 13.** Write each percent as a fraction and as a decimal. Sketch number lines to illustrate.
- a) 80% b) 12%
c) 2% d) 63%



- 14.** Write each fraction as a decimal and as a percent. Sketch number lines to illustrate.
- a) $\frac{14}{25}$ b) $\frac{19}{20}$
c) $\frac{7}{50}$ d) $\frac{1}{5}$

- 3.8 15.** There are 35 students in a Grade 7 class. On one day, 20% of the students were at a sports meet. How many students were in class?

- 16.** Find the sale price before taxes of each item.

- a) video game: 15% off \$39
b) lacrosse stick: 25% off \$29
c) fishing rod: 30% off \$45

- 17.** A souvenir Olympic hat sells for \$29.99.

- a) Russell lives in Newfoundland where there is a sales tax of 14%. Calculate the final cost of the hat in Newfoundland.
b) Jenna lives in Alberta where the GST tax is 6%. Calculate the final cost of the hat in Alberta.
c) What is the difference between the final costs of the hat in Newfoundland and Alberta?

- 18.** Madeleine received good service in a restaurant. She left the waitress a tip of 20%. Madeleine's bill was \$32.75. How much tip did the waitress receive? Show your work. Draw a number line to illustrate your answer.

