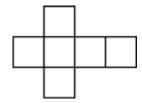Name: _____   Date: _____

Chapter 7 Warm-Up

Section 7.1

1. Tabitha is adding $\frac{1}{4}$ scoop of bran to each horse's ration. She has 4 scoops of bran and is feeding 18 horses. Does she have enough bran?

2. Use another method to solve the problem in #1.

3. A juice pitcher is $\frac{5}{6}$ full. You need $\frac{1}{2}$ of the juice in the pitcher for a punch. How much juice will be left in the pitcher?
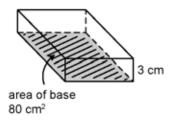
4. What shape will this net create?

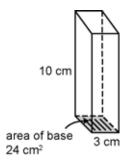**5.** Draw another possible net for the figure in #4.

Mental Math

6. a) How many $\frac{1}{2}$s are in 2?

b) How many $\frac{1}{3}$s are in 3?

c) How many $\frac{1}{7}$s are in 7?

d) What method helps you do this mentally?

7. a) Solve $\frac{1}{2} \times 2$.

b) Solve $\frac{1}{3} \times 3$.

c) Solve $\frac{1}{7} \times 7$.

d) What method helps you solve these mentally?

8. If the figure in #4 has a side length of 5 cm, what is the surface area of the figure? Show your thinking.

9. Your aunt offers to give you 150% of what you save. You save $500. How much does your aunt give you?

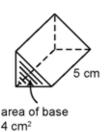**10.** Your uncle offers to give you 0.1% more than your aunt did. What does your uncle give you?

Name: _____   Date: _____

Section 7.2

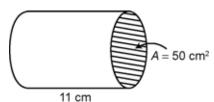**1.** What is the volume of this right rectangular prism?

area of base
80 cm²

2. This is the same rectangular prism as in #1.

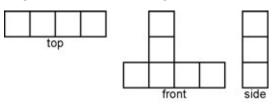**a)** What is the volume?

b) How do you know without calculating?

10 cm

area of base   3 cm
24 cm²

3. What is the volume of this right triangular prism?

5 cm

area of base
4 cm²

4. What is the volume of this cylinder?

$A = 50$ cm²

11 cm

5. Here are three views of an object. Draw the object.

top   front   side

Mental Math

6. You sell $150 worth of gifts and receive 25% of your sales.

a) How much do you receive? Show your thinking.

b) You collect 5% GST on your sales. How much GST do you collect?

7. Show $\frac{2}{9}$ as a percent.

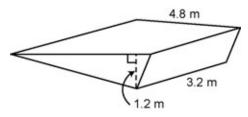*For #8 and #9, use hundred grids to represent each percent.*

8. 2.25%

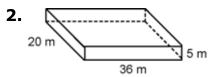**9.** $162\frac{1}{3}$%

10. Mentally estimate $\sqrt{58}$.

Name: _____   Date: _____

Section 7.3

For #1 and #2, calculate the volume of the right prisms.

1. Show your answer to two decimal places.

4.8 m

3.2 m

1.2 m

2.

20 m

36 m

5 m

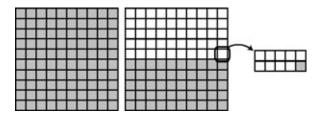*Use this visual to answer #3 to #6.*

7.8 cm

3.5 cm

4 cm

7 cm

3. Calculate the volume of this chunk of cheese.

4. At a party, you serve $\frac{3}{4}$ of the cheese. What volume do you serve? Round your answer to one decimal place.

5. What is the minimum piece of wrapping you need to cover the cheese? Show your thinking.

Mental Math

6. Estimate an answer to #5 to check the reasonableness of your calculations.

7. Mentally calculate $16 \times \frac{1}{4}$.

8. Mentally calculate $24 \times \frac{1}{12}$.
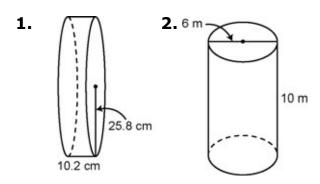
9. Show this number as a percent and a decimal.

10. What is $66\frac{2}{3}\%$ as a fraction?

Section 7.4

For #1 and #2, estimate and then calculate the volume of each cylinder. Show your thinking. Round your answer to the nearest whole unit.

1.

2.

25.8 cm
10.2 cm

6 m
10 m

For #3 to #5, use the following data from a grade 8 survey.

Favourite Saturday Activity	Votes
Computer games	18
Outdoor sports	19
Riding (includes bikes and horses)	21
Visiting friends	24
Total	82

3. Display the data using a bar graph.

4. Display the data using a circle graph.

5. Which graph best displays the data? Explain.

Mental Math

6. The volume of a cylinder is 400 cm^3. The area of its base is 40 cm^2. How high is the cylinder?

7. The volume of a cylinder is 1800 cm^3. It is 15 cm high. What is the area of its base?

For #8 to #10, determine the missing values.

8. $\dfrac{4}{\square} = \dfrac{12}{18} = \dfrac{\square}{30}$

9. $3\dfrac{1}{\square} = \dfrac{\square}{2} = \dfrac{14}{4}$

10. $\dfrac{\$7.50}{3} = \dfrac{\$2.50}{\square} = \dfrac{\$25}{\square}$