Advanced Complete MathSmart®

Section 1:
Basic Problem-solving Questions

Contents

Section 2:
Critical-thinking Questions

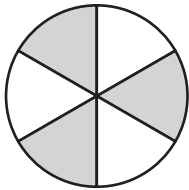### Level 1 – with hints

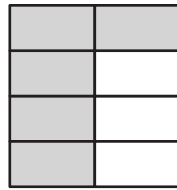### Level 2 – without hints

Fractions and Decimals

5

solving a variety of word problems that involve fractions and decimals
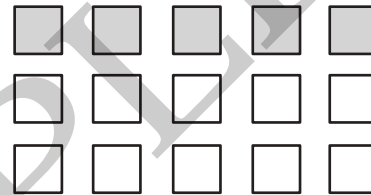
Math Skills

① Write fractions for the shaded parts.

_____ _____ _____

_____ _____
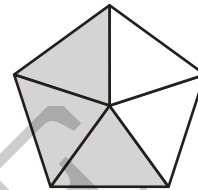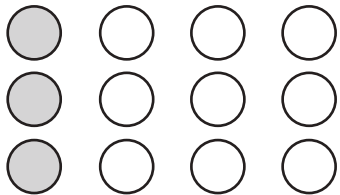
② Colour to show each fraction or decimal. Then put them in order.

$\frac{2}{5}$

0.8

$\frac{5}{6}$

0.2

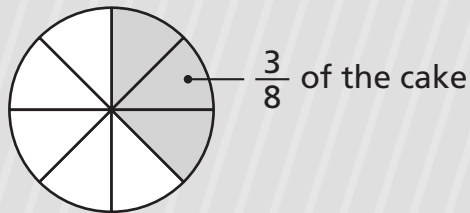**Least to Greatest**   ⬚ < ⬚ < ⬚ < ⬚

Problem Solving

Try This!

A cake was divided into 8 equal pieces. Kayla ate $\frac{3}{8}$ of the cake. How many pieces did she eat?

Solution:

Step 1: **Draw a diagram to show the fraction.**

$\frac{3}{8}$ of the cake

It is important that all parts are equal when showing a fraction.

Step 2: **Write a concluding sentence.**

Kayla ate ⬜ pieces.

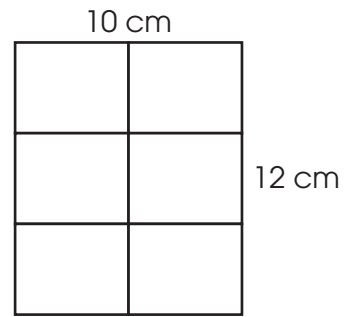① Refer to the question above. Kayla's sister, Karen, ate $\frac{1}{8}$ of the cake.

a. How many pieces did Karen eat?

Karen ate _____ piece(s).

b. Kayla's brother, Kyle, ate $\frac{4}{8}$ of the cake. Which child ate the most pieces of cake?

_____ ate the most pieces of cake.

① Amanda places 6 cards of the same size on a scrapbook page that measures 12 cm by 10 cm. What is the perimeter of 1 card?

10 cm

12 cm

Length of 1 card: 10 ÷ _____ = _____

Width of 1 card: 12 ÷ _____ = _____

Perimeter: _____ + _____ + _____ + _____ = _____

The perimeter of 1 card is _____ .

② At Lakeview Public School, classes start at 9:00 and finish at 3:00. Of that time, $\frac{5}{6}$ of it is spent in class and the rest is for recess. How many minutes of recess do the students at Lakeview Public School get each day?

Hints

How many hours are there from 9:00 to 3:00?

③ Perry has to complete 2 sheets that each have 5 math questions. It takes him 3 minutes to complete 1 question. If he starts at 12:45, what time will he finish all of the math questions?

Topics covered:

Question 1
- division
- perimeter

Question 2
- fractions
- time

Question 3
- multiplication
- time

④ Cassidy has 2 L of water. Meredith has 1875 mL. Who has more water and by how many more millilitres?

⑤ Mr. Collins's backyard is 8 m in length and 6 m in width. His inflated pool is $\frac{1}{4}$ of the length and $\frac{1}{2}$ of the width of his backyard. What is the perimeter of his pool?

⑥ Jake saves 1 loonie and 2 quarters each week. How much money will he have in 21 days?

Hints

? weeks = 21 days

⑦ 27 L of cranberry juice is divided equally into 9 bottles. How many millilitres of juice is there in 2 bottles?

Topics covered:

Question 4	Question 5	Question 6	Question 7
• subtraction	• fractions	• division	• addition
• capacity	• perimeter	• money	• division
		• time	• capacity