

Chapter 7 Fractions

Name _____

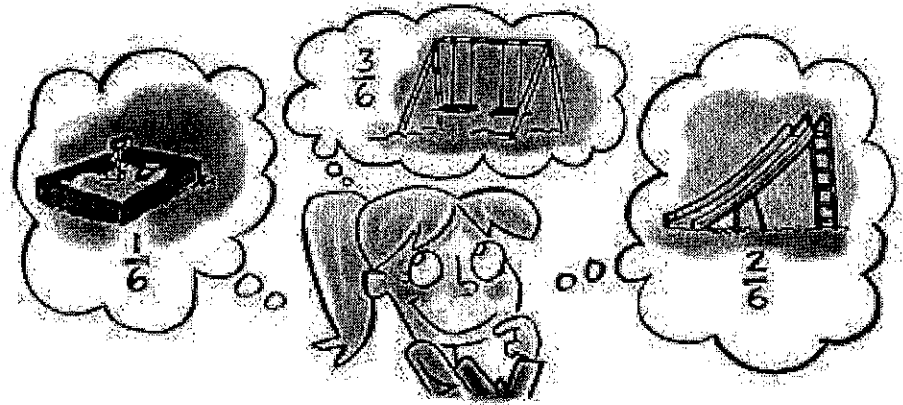
Goals Checklist

I can

- ✓ Draw a diagram to show fractions. (A)
- ✓ Model a fraction in different ways. (B)
- ✓ Compare two fractions that have the same denominator. (C)

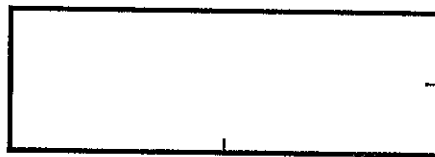
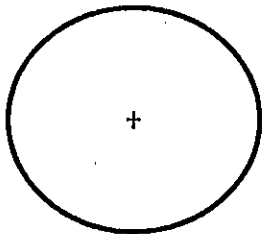
Designing a Play Space

Grace wants to design a new outdoor play space so that $\frac{1}{6}$ of the space is for a sandbox, $\frac{3}{6}$ of the space is for swings, and $\frac{2}{6}$ of the space is for a slide.



A. Use square tiles to draw the playground spaces below. Trace around the tiles to show the different spaces according to the fractions above.

B. On the circle and rectangle below show the fraction of $\frac{3}{6}$ on each shape.



C. Which of the three play spaces will be the biggest? _____

Which of the three play spaces will be the smallest? _____

Identifying Fractions

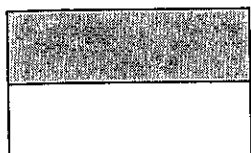
GOAL Describe parts using fractions.

1. a) Write fractions to describe the grey part and the white part of each rectangle.



grey part _____

white part _____



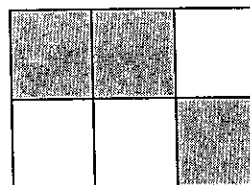
grey part _____

white part _____



grey part _____

white part _____



grey part _____

white part _____

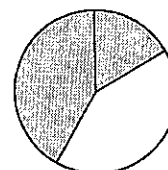
b) Which fractions have a numerator of 3? _____

c) Which fraction has a denominator of 2? _____

2. a) Fold a rectangle into thirds. Colour the rectangle to show two thirds $\left(\frac{2}{3}\right)$.

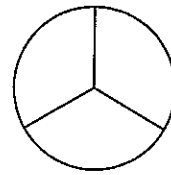
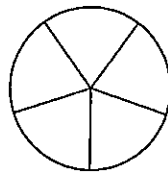
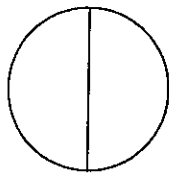
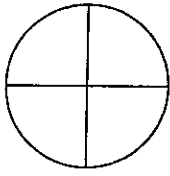
b) How do you know that the parts of the rectangle are equal?

3. Why should you not describe the grey part of this circle as $\frac{2}{3}$?



4. a) Colour these pictures to show each fraction.

$$\frac{1}{2} \quad \frac{1}{3} \quad \frac{1}{4} \quad \frac{1}{5}$$

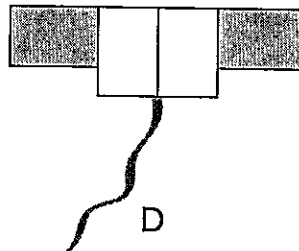
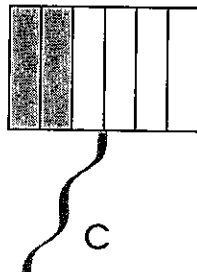
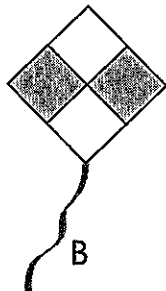
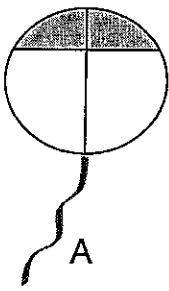


b) How are the pictures the same?

c) How are the pictures different?

5. a) Which kites below show equal parts? _____

b) Which kites do not show equal parts? _____



6. What does the 2 mean in each fraction?

2 is the numerator of the fraction $\frac{2}{3}$. That means...

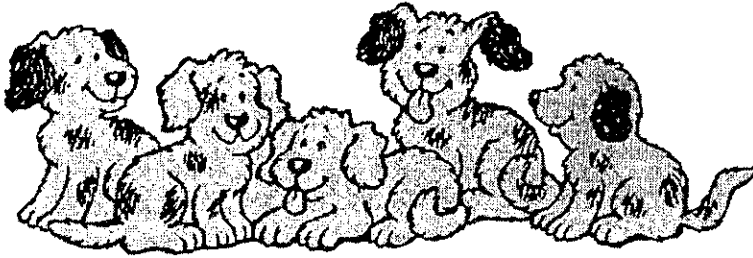
2 is the denominator of the fraction $\frac{1}{2}$. That means...

Unit 7
Lesson 2

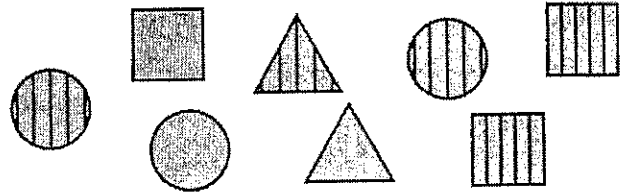
Seeing and Using Fractions

GOAL Name the fractions for each group.

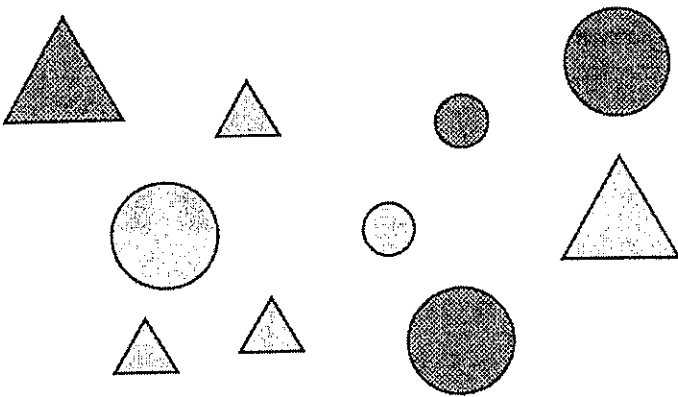
1. Answer each question.



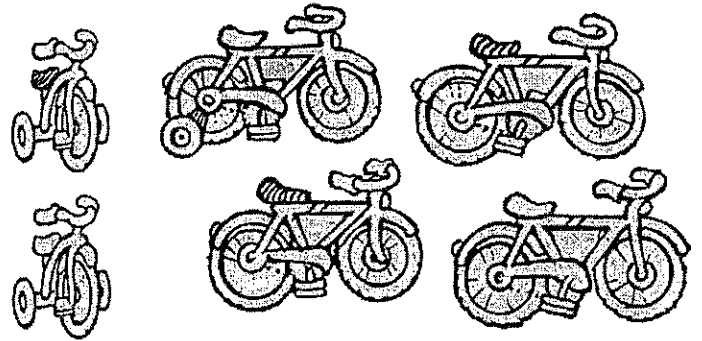
- a) What fraction of the dogs have
 spots? _____
 black ears? _____
 spots and black ears? _____



- b) What fraction of the shapes are
 striped? _____
 squares? _____
 striped squares? _____

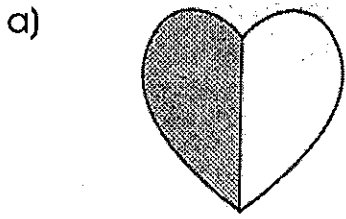


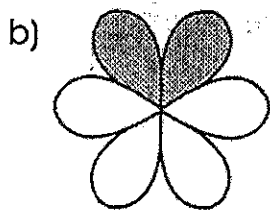
- c) What fraction of the shapes are
 shaded? _____
 circles? _____
 large? _____
 shaded circles? _____
 large circles? _____

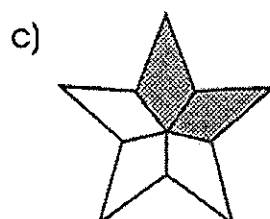


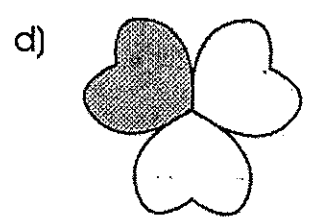
- d) What fraction of the bikes
 have 2 wheels? _____
 have 3 wheels? _____
 have 4 wheels? _____
 have a white seat? _____
 have a striped seat? _____

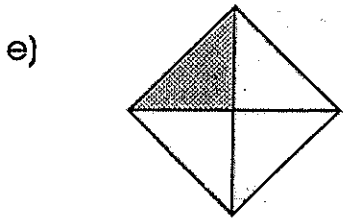
2. Print the fraction for each shaded part.

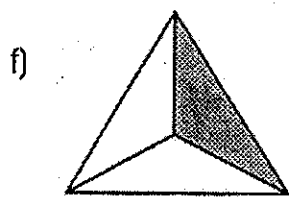


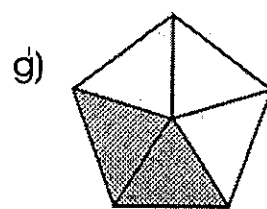


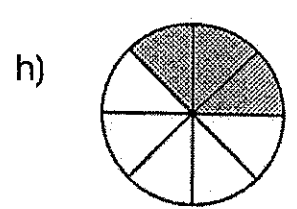


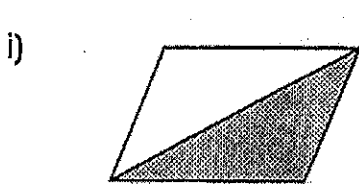


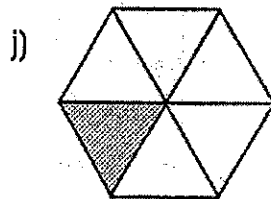


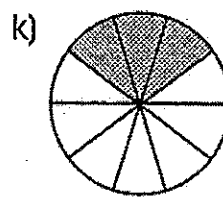


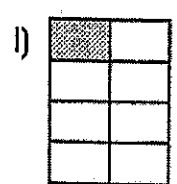




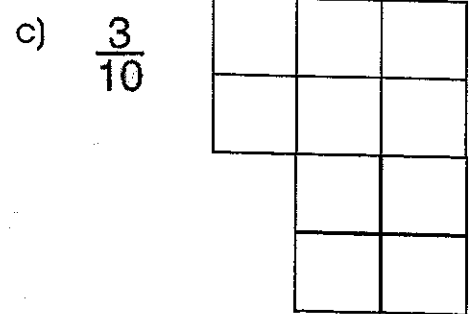
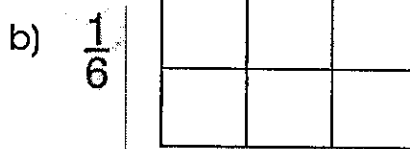
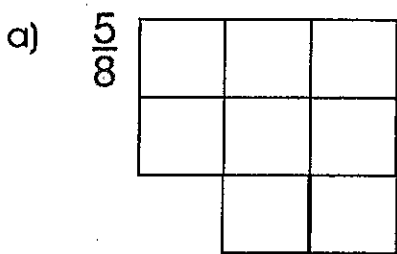








3. Shade the fraction for each picture.



Unit 7
Lesson 3

Creating Fractions



Model fractions.

You will need

- square tiles
- linking cubes
- pattern blocks
- fraction circles

1. a) Use a model to show each fraction.
 Sketch your models.

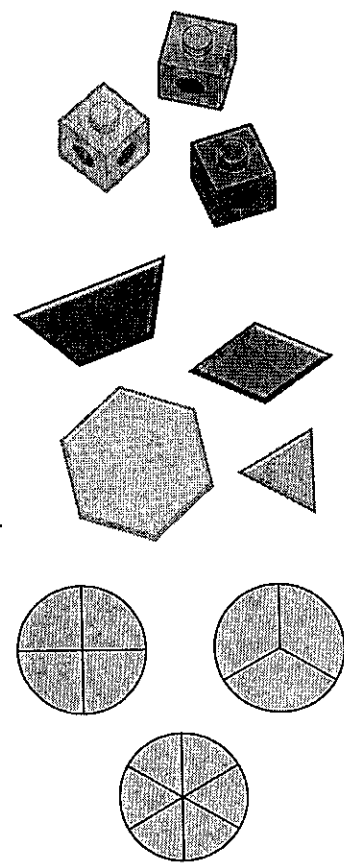
$$\frac{3}{6}$$

$$\frac{4}{6}$$

$$\frac{5}{6}$$

b) What is the same about all your models?

c) What is the same about all the fractions?



2. a) Use a model to show each fraction.
 Sketch your models.

$$\frac{2}{3}$$

$$\frac{2}{4}$$

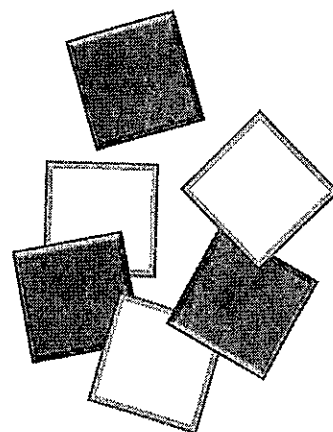
$$\frac{2}{5}$$

b) What is the same about all your models?

c) What is the same about all the fractions?

3. Kim has 3 dark tiles and 3 light tiles to make models. She does not have to use all of the tiles.

a) List 4 fractions that Kim can model. Use at least 3 different numerators. Sketch the models.



b) Write 1 fraction that Kim cannot model with her tiles. Explain why she cannot model it.

4. This shape is $\frac{1}{4}$ of a larger shape. Sketch what the larger shape might look like.



5. How are the models for fractions with a numerator of 4 different from the models of fractions with a denominator of 4?

Unit 7
Lesson 4

Representing a Fraction in Different Ways

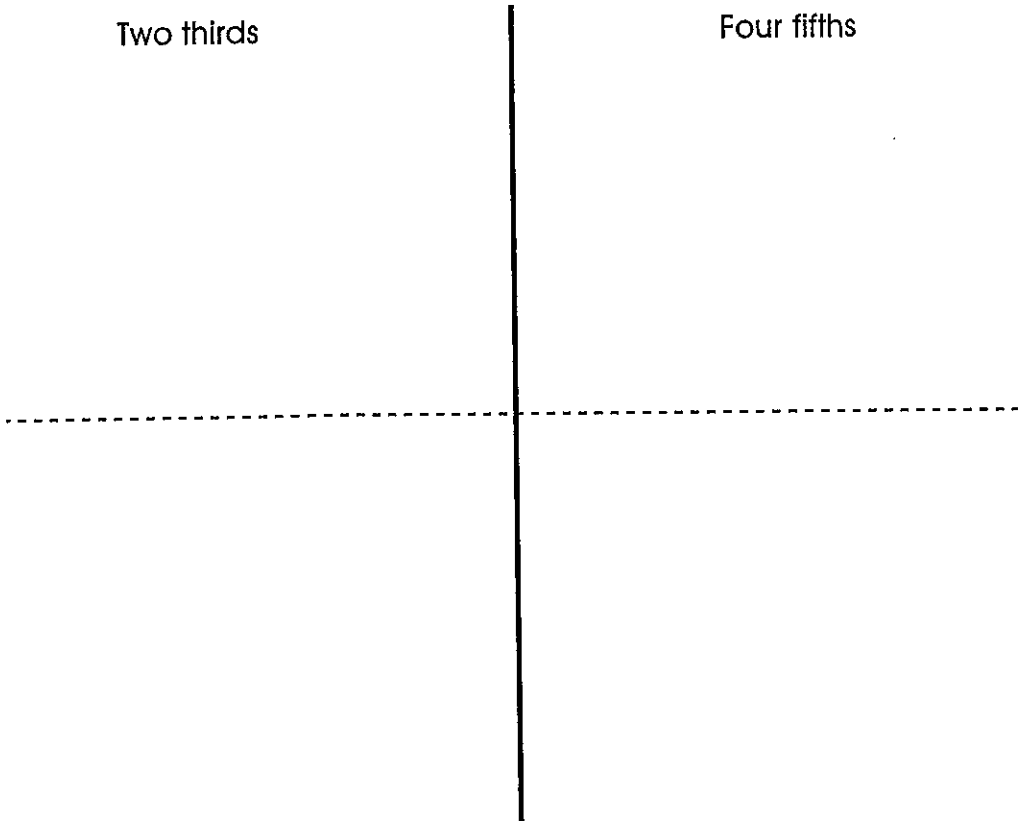


Use different materials and shapes to represent a fraction.

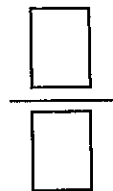
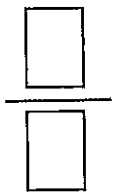
1. Draw two different pictures of the ways you could show each fraction.

Two thirds

Four fifths



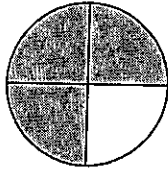
2. Make two fractions below. Use 1, 2 or 3 for the numerator. Use 4, 5 or 6 for the denominator. Draw a picture for each fraction.

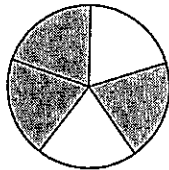


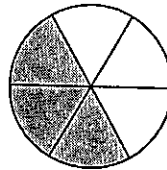


Lesson 1

1. a) What fraction of each circle is grey?





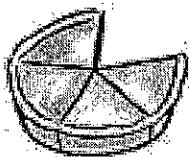


b) How are the fractions in part a) the same?

c) What fraction of the middle circle is white? _____

2. What fraction has been eaten? What fraction is left?

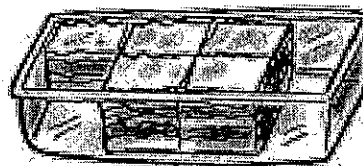
a)



eaten: _____

left: _____

b)



eaten: _____

left: _____

3. Ellen says that both pictures at the right show $\frac{2}{3}$.
Is she correct? Why or why not?



Lesson 2

4. Describe 3 fractions you see in this picture.



Lesson 3

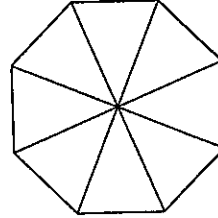
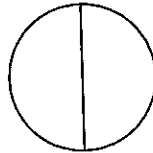
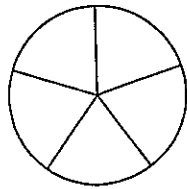
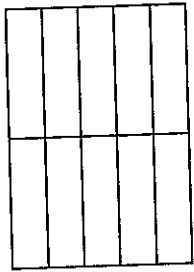
5. Colour a shape to show each fraction. Write the fraction below its picture.

$\frac{1}{5}$

$\frac{5}{8}$

$\frac{3}{10}$

$\frac{2}{2}$



Lesson 4

6. a) Show $\frac{4}{5}$ in 2 different ways. Sketch your models.

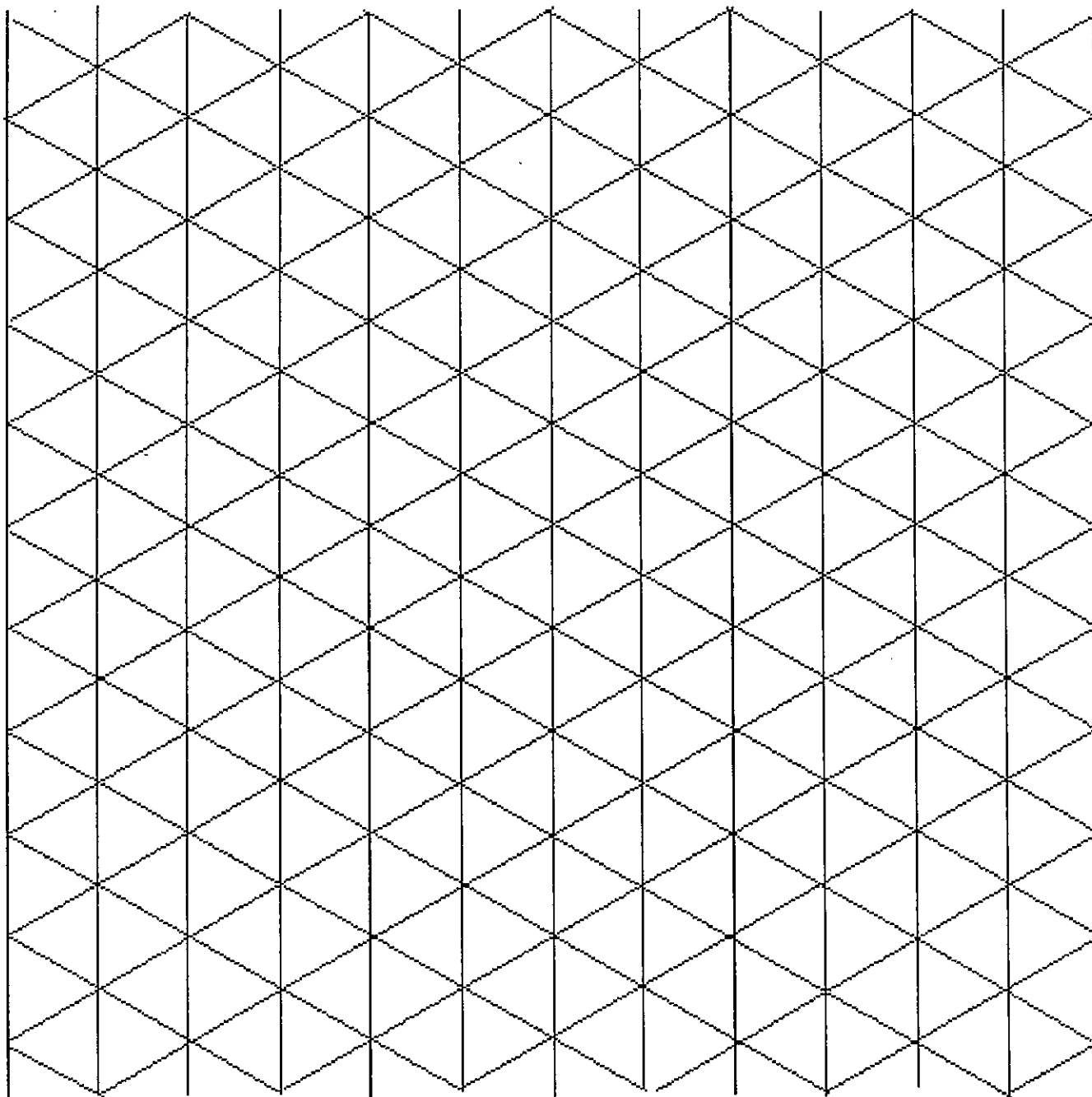
b) Tell how your 2 models are the same. _____

Unit 7
Lesson 5

Modelling Fractions

GOAL Use the same materials to show different fractions.

1. Use pattern blocks to show six different fractions.
Draw the six fractions on the pattern block grid below. Print the fraction for each.





Describe situations in which fractions are used.

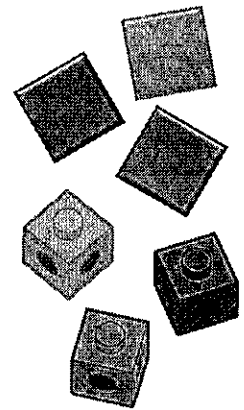
You will need

- square tiles or linking cubes
- pattern blocks

1. a) Create models for $\frac{1}{3}$, $\frac{2}{4}$, and $\frac{3}{5}$.

b) How are your models the same?

c) How are your models different?

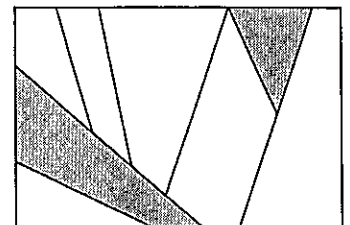


2. Each person at Sam's party eats $\frac{1}{8}$ of a pizza. The whole pizza is eaten. How many people are at Sam's party? Explain your thinking.

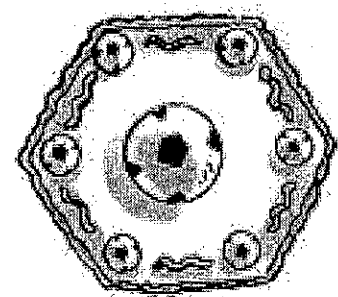
Communication Checklist

- Did you explain your thinking?
- Did you show all the steps?
- Did you use math language?

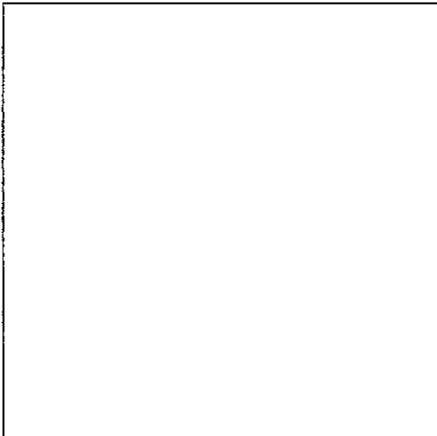
3. Clare said that grey covers $\frac{2}{8}$ of the rectangle at the right. Explain why she is not correct.



4. Ryan is cutting this cake into 6 equal pieces.

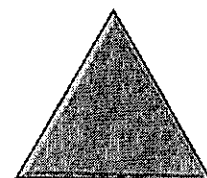


a) Draw or write instructions to explain how to cut this cake into equal pieces.



b) How could you check that the pieces are equal?

5. Tell or show why a triangle pattern block might be $\frac{1}{2}$ of one shape but $\frac{1}{6}$ of a different shape.



6. Why should you talk about parts being the same size when you are explaining how to show fractions?

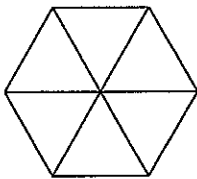
Unit 7
Lesson 7

Comparing Fractions



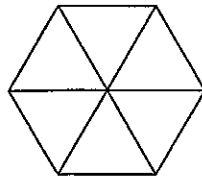
Compare fractions with the same denominator.

1. a) Colour shape A below to show $\frac{3}{6}$.
- b) Colour shape B to show $\frac{3}{6}$ in a different way.
- c) Colour shape C to show a fraction less than $\frac{3}{6}$.
Write the fraction below.
- d) Colour shape D to show a fraction greater than $\frac{3}{6}$.
Write the fraction below.



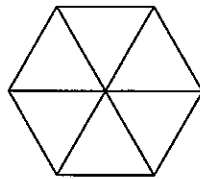
A

$\frac{3}{6}$

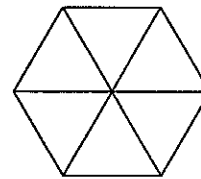


B

$\frac{3}{6}$

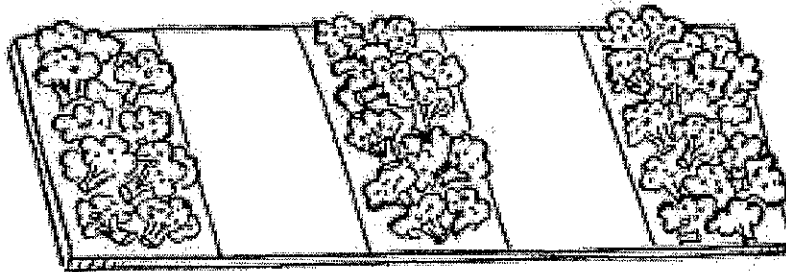


C



D

2. a) What 2 fractions does the vegetable tray show?



- b) Write a fraction that is greater than the fractions you wrote in part a). Use the picture to help you.

3. Complete each sentence with a fraction.

a) $\frac{2}{5}$ is less than _____.

c) $\frac{1}{2}$ is less than _____.

b) $\frac{6}{8}$ is less than _____.

d) $\frac{3}{5}$ is less than _____.

4. Circle the fraction that is greater in each pair.

a) $\frac{3}{5}$ OR $\frac{1}{5}$

c) $\frac{3}{8}$ OR $\frac{5}{8}$

b) $\frac{4}{6}$ OR $\frac{2}{6}$

d) $\frac{3}{10}$ OR $\frac{6}{10}$

5. Draw a picture to prove that one of your answers in Question 4 is correct. Explain your picture.

6. Circle the fraction that is less in each pair.

a) $\frac{3}{4}$ OR $\frac{2}{4}$

c) $\frac{2}{6}$ OR $\frac{4}{6}$

b) $\frac{2}{3}$ OR $\frac{1}{3}$

d) $\frac{4}{10}$ OR $\frac{9}{10}$

7. Sarah knows that $\frac{3}{8}$ is less than another fraction.

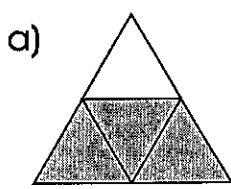
What could the other fraction be? How do you know?



Follows Student Book page 178

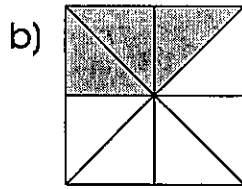
Lesson 1

1. Write fractions to describe the grey part and the white part of each shape.



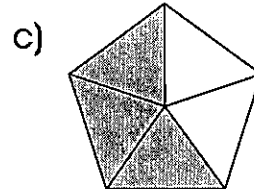
grey part _____

white part _____



grey part _____

white part _____



grey part _____

white part _____

2. Identify the numerator and the denominator of each fraction.

a) $\frac{3}{8}$

b) $\frac{2}{10}$

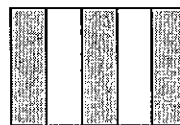
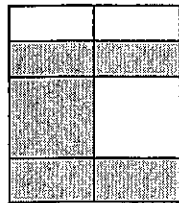
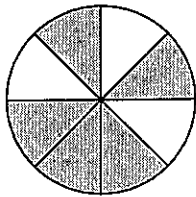
c) $\frac{1}{7}$

d) $\frac{4}{6}$

numerator

denominator

3. Circle the pictures that show $\frac{5}{8}$.



Lesson 3

4. Sketch a shape that shows $\frac{5}{6}$.

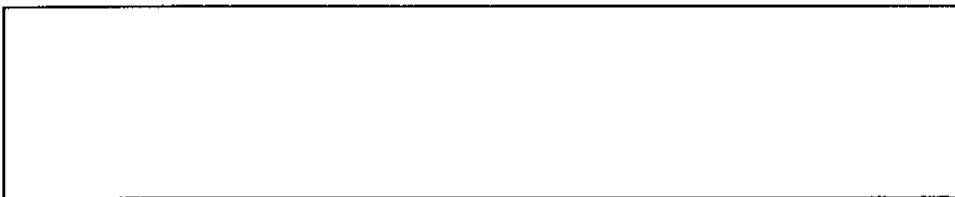
Label the other fraction that your shape shows.

5. Model each fraction as part of a rectangle.
Sketch your models.

a) $\frac{2}{3}$ of a cake has been eaten.



b) $\frac{3}{5}$ of a rug is yellow.

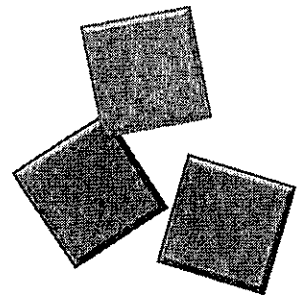


Lesson 4

6. Use coloured tiles to show each fraction.
Sketch your models.

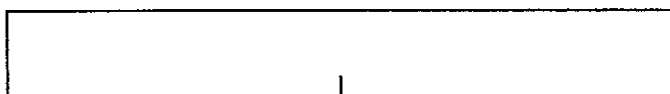
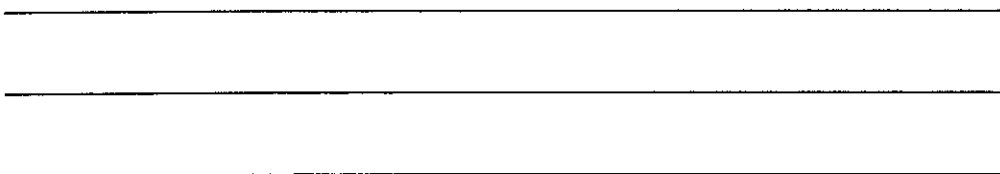
a) $\frac{3}{6}$

b) $\frac{1}{4}$



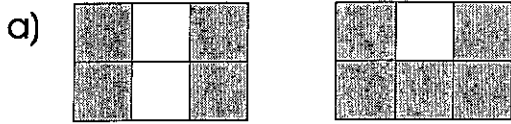
Lesson 6

7. Draw or write instructions for folding a strip of paper to
show $\frac{3}{8}$. Draw the fraction on the strip below the lines.

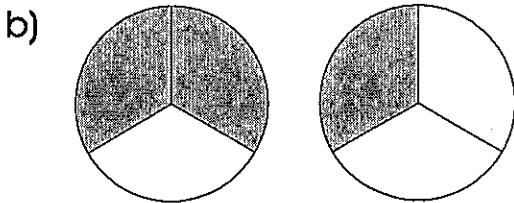


Lesson 7

8. Circle the picture that shows the greater fraction of shaded parts.



The greater fraction is _____.



The greater fraction is _____.

9. Explain why $\frac{3}{4}$ is greater than $\frac{1}{4}$ if they are shown on the same shape.

10. Eva has finished shovelling more than $\frac{5}{8}$ of a driveway. What fraction of the driveway might she have shovelled? Draw pictures to show 2 possible answers.



