

Chapter 6  
**Lesson 4**

# Percents as Fractions or Decimals

**You will need**

- hundredths grids
- pencil crayons



**GOAL**

Relate percents to equivalent fractions and decimals.

In 2004, Canadians recycled about 27% of their household waste. This percent has been increasing.

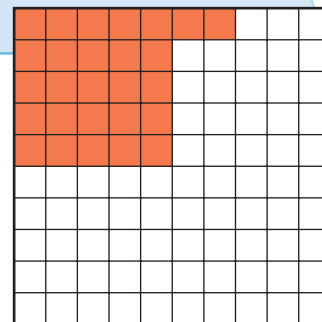


**What percent of trash might Canadians be recycling now?**



## Mai's Model

I'll use a hundredths grid to represent 100% of the trash. I can show 27% on a grid.



- What fraction represents the part of the grid that is coloured?
- What decimal represents the part of the grid that is coloured?
- What percent of trash is not recycled? Explain.
- How do you know that Canadians recycled more than  $\frac{1}{4}$  of their trash in 2004?
- What portion of their trash might Canadians be recycling now? Express this value as a fraction and as a decimal. Why did you choose this value?

## Reflecting

- F. Why is it easy to change a decimal such as 0.37 into a percent?
- G. Why is it helpful to think of 0.6 as 0.60 if you want to write 0.6 as a percent?

## Checking

1. Copy and complete this chart.

### Equivalent Forms

Percent	Fraction	Decimal
25%		
	$\frac{3}{100}$	
		0.4

## Practising

2. Write each percent as a fraction and as a decimal.  
a) 75%      b) 38%      c) 4%      d) 60%
3. Write each percent as a fraction and as a decimal.  
a) 20% of the people in the world have Internet access.  
b) 96% of the people who started a marathon race completed it.
4. Colour a hundredths grid to show each fraction or decimal. Write the equivalent percent.  
a) 0.85      b)  $\frac{5}{10}$       c)  $\frac{18}{100}$       d) 0.09
5. Bradan coloured more than  $\frac{2}{5}$  of a hundredths grid, but less than 0.47 of the grid. About what percent of the grid is covered? How do you know?
6. Why can any percent be written as a fraction or a decimal? Use an example to explain.