Topic 9 Lesson 8

Understand it!

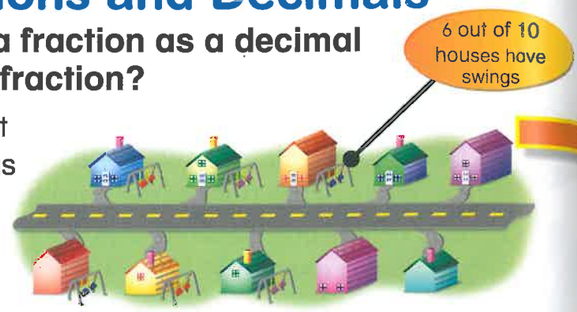
Fractions and decimals can be used to name the same amounts.

Writing Fractions and Decimals

How can you write a fraction as a decimal and a decimal as a fraction?

On Kelsey Street, six out of 10 homes have swings in their backyards.

Write $\frac{6}{10}$ as a decimal.



Write $\frac{6}{10}$ as a decimal.

$\frac{6}{10}$ is six tenths or 0·6.

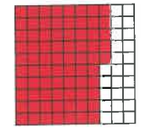
$\frac{6}{10} = 0{\cdot}6$

So 0·6 of the houses have swings.

In Rolling Hills, 0·75 of the houses are two-storey homes.

Write 0·75 as a fraction.

$0{\cdot}75 = \frac{75}{100}$



So, $\frac{75}{100}$, or $\frac{3}{4}$, of the houses are two-storey homes.

Guided Practice

Write the fraction and the decimal for each of these shaded grids.

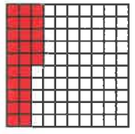
1

fraction ☐ decimal ☐

2

fraction ☐ decimal ☐

3

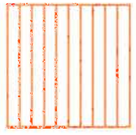


fraction ☐ decimal ☐

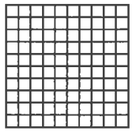
4

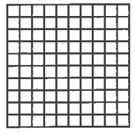
fraction ☐ decimal ☐

Shade the following fractions or decimals on each grid.

5  $\frac{7}{10}$

6  0·7

7  $\frac{50}{100}$

8  0·5

Reasoning

9 Explain why the fraction $\frac{4}{10}$ is not written in decimal form as 0·04.

Independent Practice

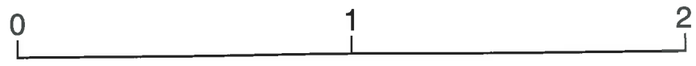
10 Draw a line to match the fractions and decimals.

$\frac{1}{10}$	$\frac{33}{100}$
0·25	0·5
$\frac{1}{2}$	0·10
0·33	$\frac{25}{100}$

Problem Solving

11a Place these fractions and decimals in order on the number line.

$1\frac{1}{2}$, 0·5, $\frac{3}{4}$, 1·75



b Explain why you chose to place 1·75 in this position.

Curriculum link: NA079