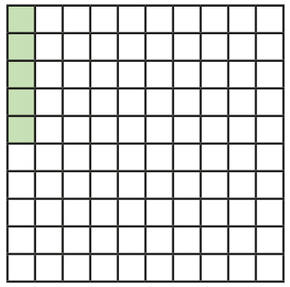
Decimals as fractions (1)

1 The hundred square represents 1 whole.



a) What fraction is represented by the shaded squares?

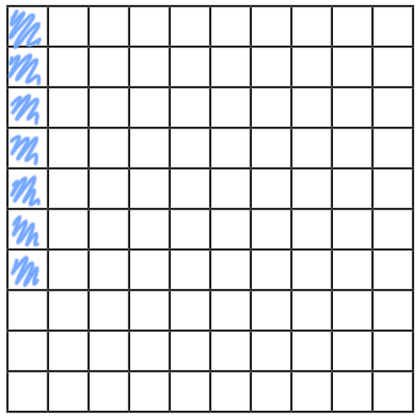
$\frac{5}{100}$

b) Convert the fraction to a decimal.

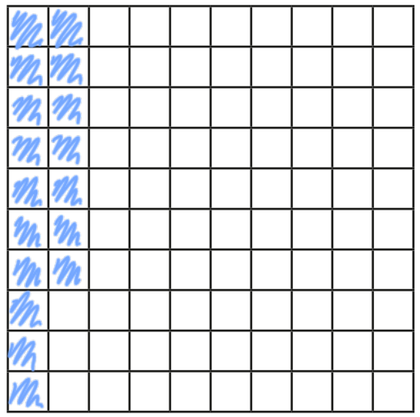
0·05

2 Colour the grid to represent the fraction and the decimal.

a) $\frac{7}{100}$



b) 0.17



3 What fractions and decimals do the counters represent?

a) $\frac{1}{100}$ $\frac{1}{100}$ $\frac{1}{100}$ $\frac{1}{100}$

fraction = $\frac{4}{100}$ decimal = 0·04

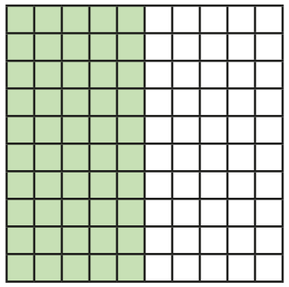
b) $\frac{1}{100}$ $\frac{1}{100}$ $\frac{1}{100}$ $\frac{1}{100}$ $\frac{1}{100}$ $\frac{1}{100}$

fraction = $\frac{6}{100}$ decimal = 0·06

c) $\frac{1}{10}$ $\frac{1}{10}$ $\frac{1}{10}$ $\frac{1}{10}$ $\frac{1}{10}$ $\frac{1}{10}$ $\frac{1}{10}$

fraction = $\frac{7}{10}$ decimal = 0·7

4 Amir has coloured part of a hundred square.



a) What fraction is represented by the coloured squares?

$\frac{50}{100}$

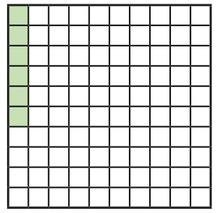
b) Write this fraction in a different way.

$\frac{1}{2}$

c) Write the fraction as a decimal.

0·5

5 Huan says he has coloured 0.6 of the hundred square.



Explain the mistake that Huan has made.

He has coloured 6 hundredths not 6 tenths.

6 Write <, > or = to complete the statements.

a) 0.4 (=) $\frac{40}{100}$

b) 0.02 (<) $\frac{20}{100}$

c) 0.6 (=) $\frac{6}{10}$

d) 0.5 (>) $\frac{5}{100}$

e) 0.88 (=) $\frac{88}{100}$

f) 0.88 (<) $\frac{89}{100}$

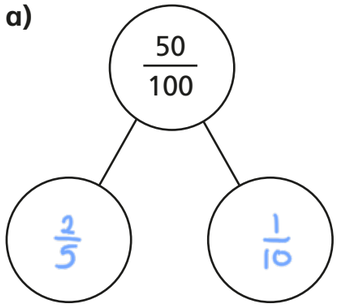
7 Complete the table.

Fifths	Tenths	Decimals
$\frac{1}{5}$	$\frac{\boxed{2}}{10}$	0.2
$\frac{\boxed{2}}{5}$	$\frac{4}{10}$	0·4
$\frac{3}{5}$	$\frac{6}{10}$	0.6
$\frac{4}{5}$	$\frac{8}{\boxed{10}}$	0·8

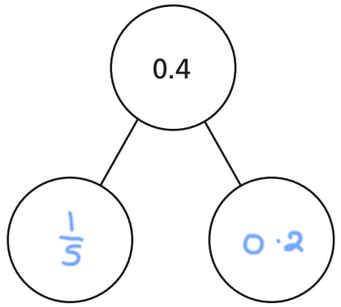
8 Complete the part-whole models using fractions or decimals.

e.g.

a)

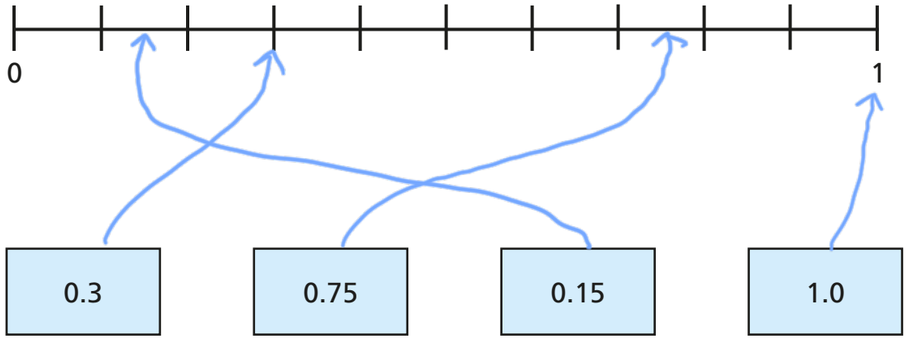


b)



Compare answers with a partner.

9 Here is a number line.



Draw arrows from the numbers to show their place on the line.