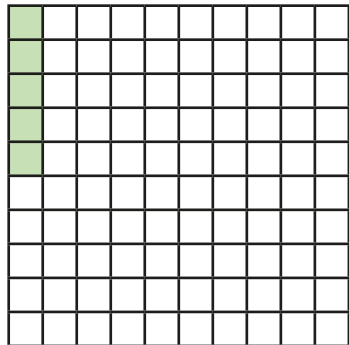# Decimals as fractions (1)

1 The hundred square represents 1 whole.

a) What fraction is represented by the shaded squares? $\dfrac{5}{100}$
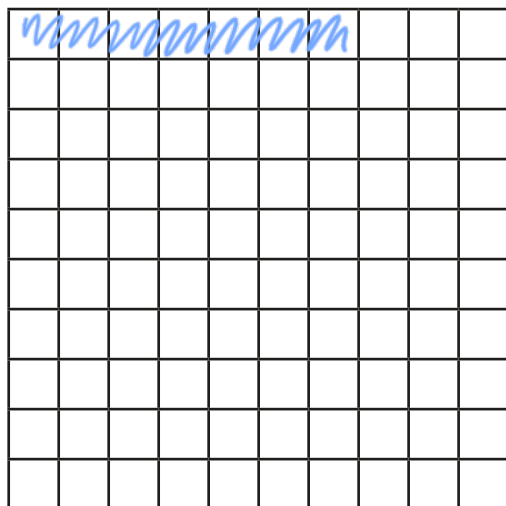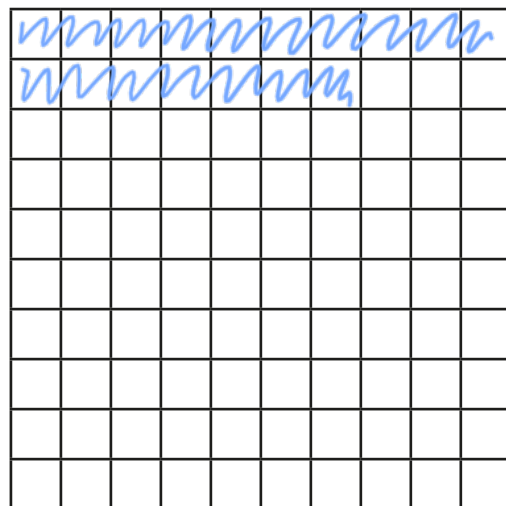
b) Convert the fraction to a decimal. 0.05

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

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

b) 0.17

3 What fractions and decimals do the counters represent?

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

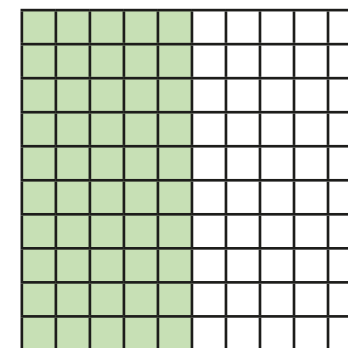fraction = $\dfrac{4}{100}$ decimal = 0.04

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

fraction = $\dfrac{6}{100}$ 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 = $\dfrac{7}{10}$ decimal = 0.7

4 Amir has coloured part of a hundred square.

a) What fraction is represented by the coloured squares? $\dfrac{50}{100}$
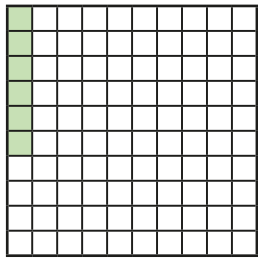
b) Write this fraction in a different way. $\dfrac{5}{10}$

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 in 6 hundredths not 6 tenths.
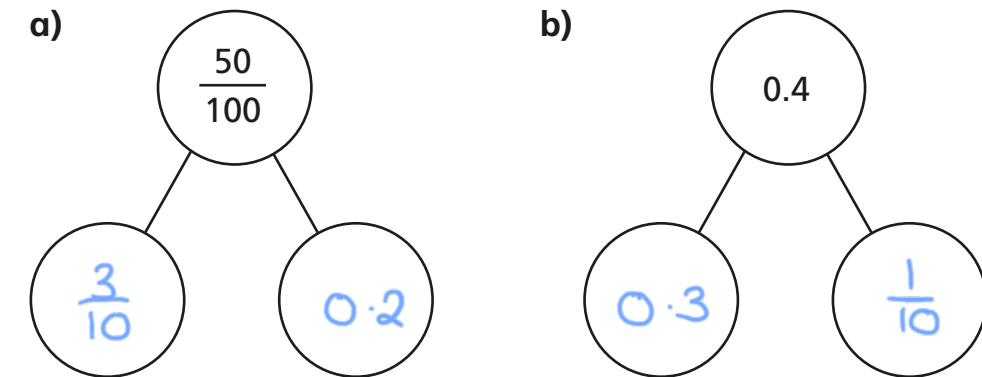
6 Write <, > or = to complete the statements.

a) 0.4 $=$ $\frac{40}{100}$ d) 0.5 $>$ $\frac{5}{100}$

b) 0.02 $<$ $\frac{20}{100}$ e) 0.88 $=$ $\frac{88}{100}$

c) 0.6 $=$ $\frac{6}{10}$ f) 0.88 $<$ $\frac{89}{100}$

7 Complete the table.

Fifths	Tenths	Decimals
$\frac{1}{5}$	$\frac{2}{10}$	0.2
$\frac{2}{5}$	$\frac{4}{10}$	0.4
$\frac{3}{5}$	$\frac{6}{10}$	0.6
$\frac{4}{5}$	$\frac{8}{10}$	0.8

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

Eg.

a) $\frac{50}{100}$ — $\frac{3}{10}$, 0.2

b) 0.4 — 0.3 , $\frac{1}{10}$

Compare answers with a partner.

9 Here is a number line.

0 ———————————————— 1
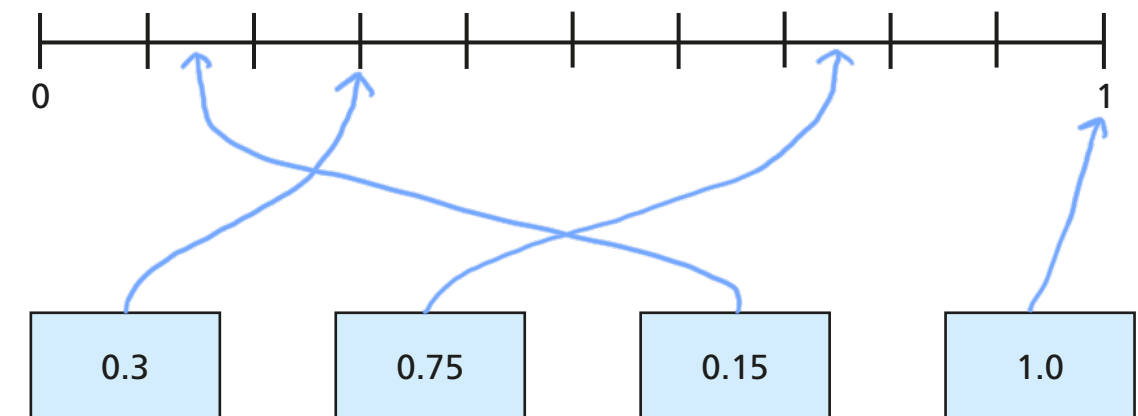
Draw arrows from the numbers to show their place on the line.

| 0.3 | 0.75 | 0.15 | 1.0 |