Decimals as fractions (2)
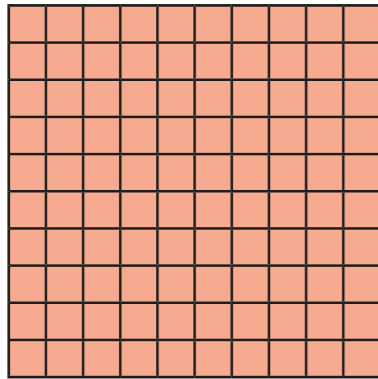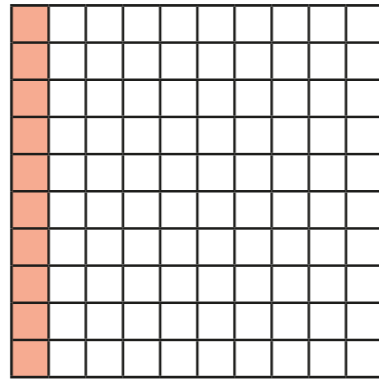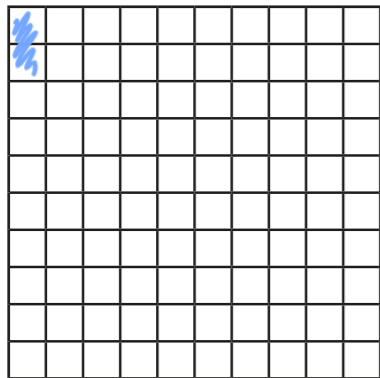
1 This grid represents 1

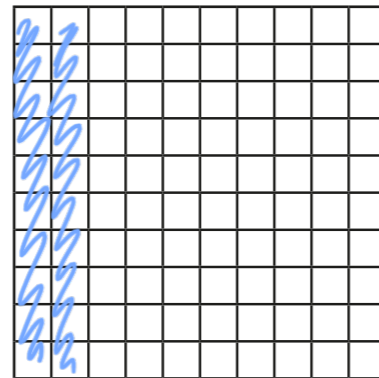This grid represents 0.1 or $\dfrac{10}{100}$ or $\dfrac{1}{10}$

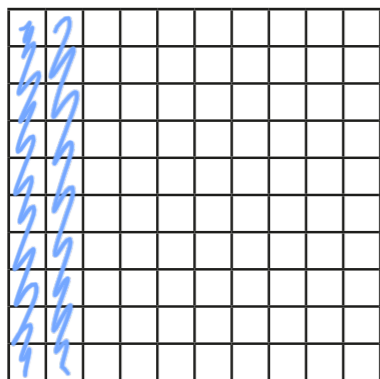Colour the hundred squares to represent the fractions.
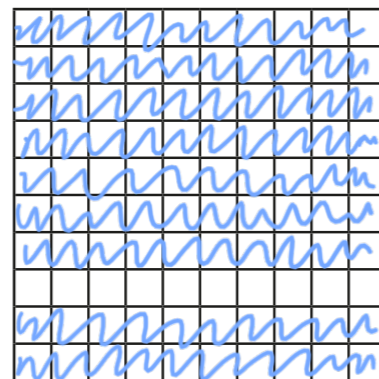
a) $\dfrac{2}{100}$

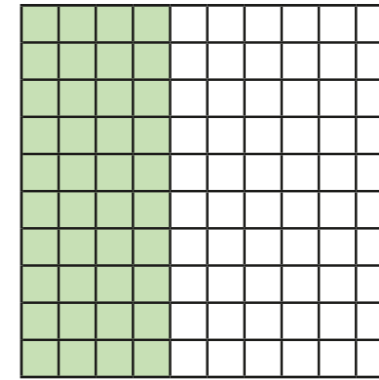c) $\dfrac{20}{100}$

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

d) $\dfrac{90}{100}$

2 Complete the numbers to show how much of the square is shaded.
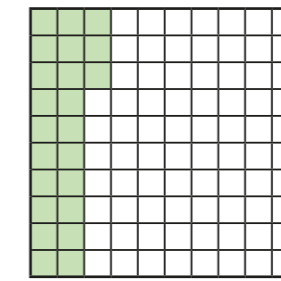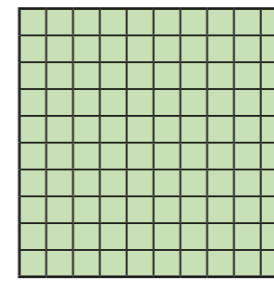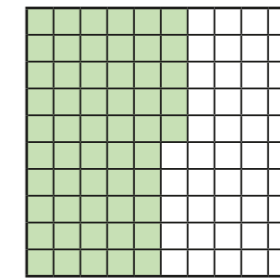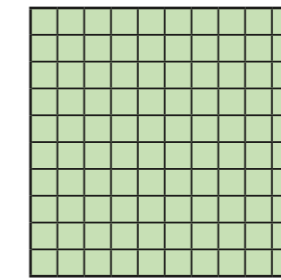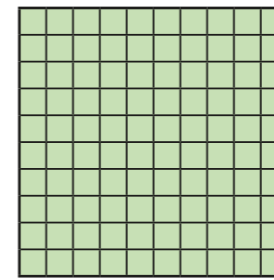

$\dfrac{40}{100}$

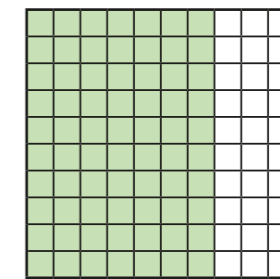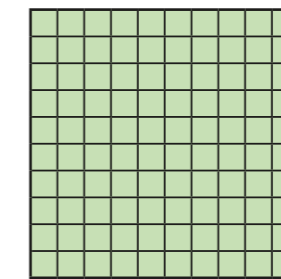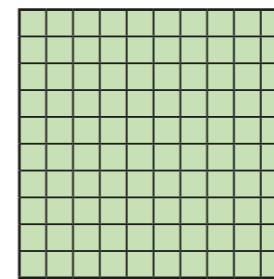$\dfrac{4}{10}$

0.4

3 What fractions and decimals are represented?

a)

$1\dfrac{23}{100} = \boxed{1\cdot23}$

b)

$2\dfrac{\boxed{55}}{100} = \boxed{2\cdot55}$

c)

$2\dfrac{\boxed{7}}{10} = \boxed{2\cdot7}$

4

a) Represent 2.15
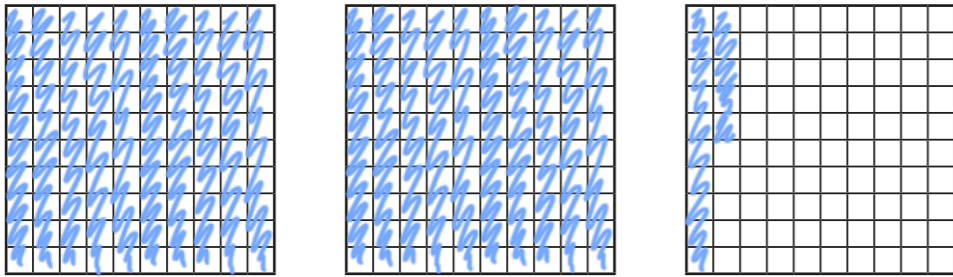
b) Represent $3\frac{7}{10}$

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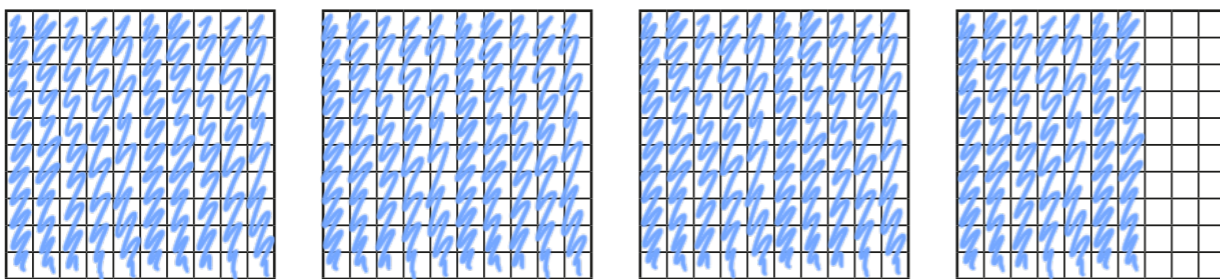
5 **a)** Label the number line with the decimals.

| 1.3 | 1.6 | 1.85 | 1.98 |

1·3   1·6   1·85   1.98

1.0 ————————————————— 2.0
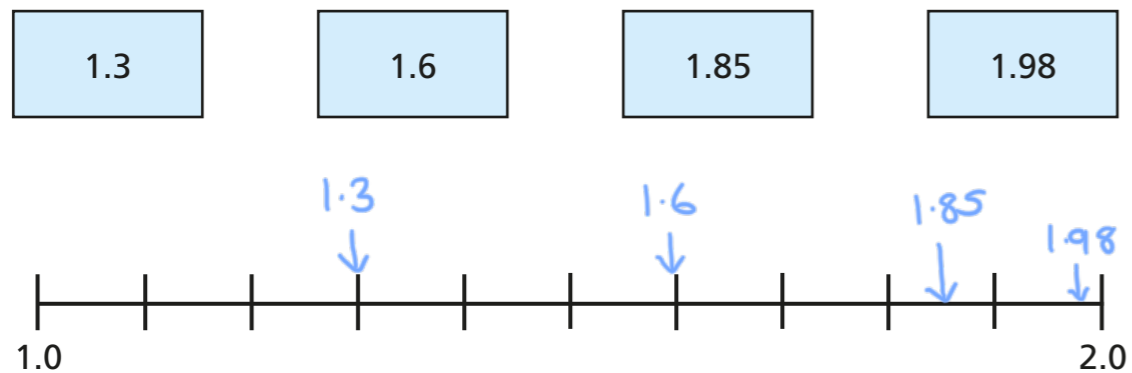
b) Label the number line with the fractions.

| $5\frac{1}{10}$ | $5\frac{1}{2}$ | $5\frac{73}{100}$ | $\frac{590}{100}$ |

$5\frac{1}{10}$ $5\frac{1}{2}$ $5\frac{73}{100}$ $\frac{590}{100}$

5.0 ————————————————— 6.0

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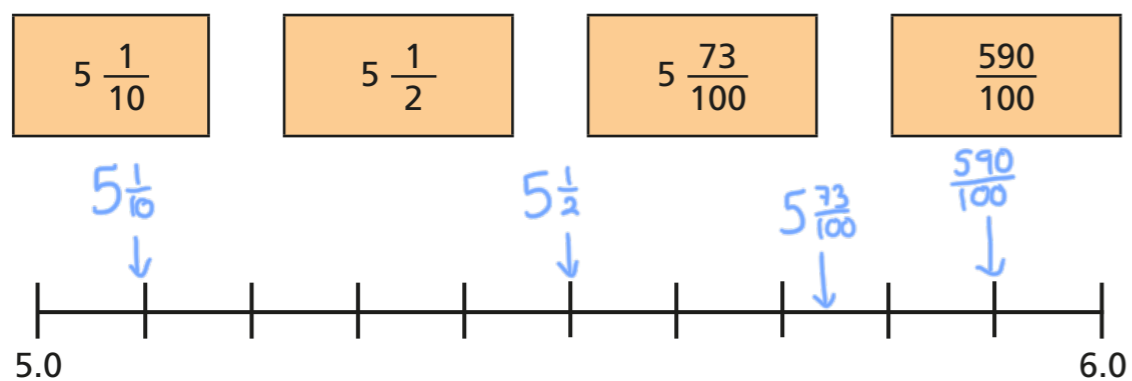
6 Complete the table.

Decimal	Decimal (expanded form)	Fraction	Fraction (expanded form)	In words
2.13	2 + 0.1 + 0.03	$2\frac{13}{100}$	$2 + \frac{1}{10} + \frac{3}{100}$	2 ones, 1 tenth and 3 hundredths
4.37	4 + 0·3 + 0·07	$4\frac{37}{100}$	$4 + \frac{3}{10} + \frac{7}{100}$	4 ones, 3 tenths and 7 hundredths
5·62	5 + 0.6 + 0.02	$5\frac{62}{100}$	$5 + \frac{6}{10} + \frac{2}{100}$	5 ones, 6 tenths and 2 hundredths
8·02	8 + 0·02	$8\frac{2}{100}$	$8 + \frac{2}{100}$	8 ones and 2 hundredths

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7 Write the decimals as fractions.
Give your answer as a mixed number.

a) $32.6 = 32\frac{6}{10}$

b) $2.03 = 2\frac{3}{100}$

c) $13.08 = 13\frac{8}{100}$

d) $3.98 = 3\frac{98}{100}$

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8 Use the digits 3, 4 and 5 to complete the decimal number.

e.g. | 3 | 4 | . | 0 | 5 |

How many different numbers can you make?