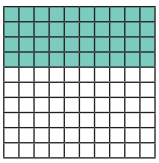
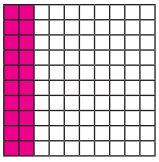
1) Write equivalent fractions and decimals for the models. One has been done for you.

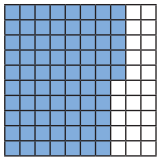


$\frac{4}{10} = \frac{40}{100} = 0.4$

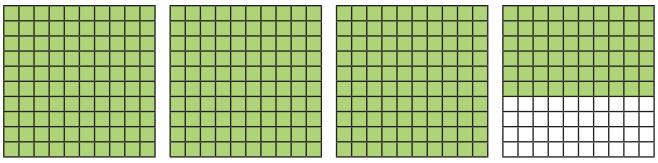
a)



b)



c)



2) Complete the tables.

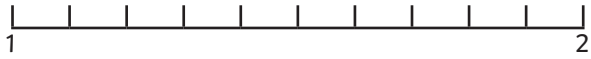
a)

Place Value Counters	Decimal	Decimal Expanded
1 1 0.1 0.1 0.1 0.1 0.01 0.01 0.01	2.43	2 + 0.4 + 0.03
	3.51	
		5 + 0.2 + 0.03

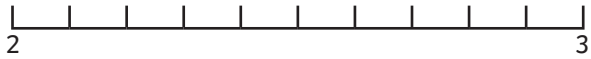
b)

Words	Decimal	Decimal Expanded
Four ones, two tenths, nine hundredths.	$4\frac{29}{100}$	$4 + \frac{2}{10} + \frac{9}{100}$
_____ _____		$3 + \frac{8}{100}$
_____ _____	$2\frac{17}{100}$	

1) **a)** Mark with a dot where $1\frac{3}{10}$ is on the number line.



b) Mark with a dot where $2\frac{75}{100}$ is on the number line.



2) Work out the mystery numbers. Each number needs follow all the clues. There are 2 possible answers per question.

a)
- contains the digits: 1, 4, 6
- contains 2 decimal places
- greater than 3
- tenths digit is smaller than the hundredths digit

b)
- contains the digits: 2, 1, 5, 0
- contains 1 decimal place
- no tens
- whole number is greater than 400

c) Choose an answer from **a)** or **b)** and write an extra clue which would mean that there is only 1 possible answer.

3)

Liv

I know how to convert a fraction that has 10 or 100 as the denominator, to a decimal.

$\frac{32}{100} = 0.32$, $\frac{8}{100} = 0.08$, $\frac{4}{10} = 0.4$

However, I'm unsure how to convert $\frac{2}{5}$ or $\frac{4}{25}$ to decimals.

Explain to Liv how to convert $\frac{2}{5}$ and $\frac{4}{25}$ to decimals.

1) **a)** These 4 digits are used to make numbers with 2 decimal places:

2	8	1	3

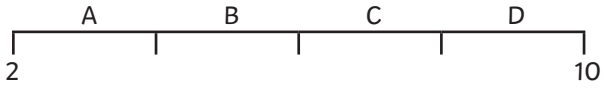
Each number contains all the digits.

The numbers are less than 50.
The smallest value digit is not a one.
The tenths digit is an odd number.
The ones digit is greater than the hundredths digit.

Write all the numbers it could be.

b) Write the numbers as mixed numbers.

2) Write a number to 2 decimal places, and an equivalent mixed number fraction, that would fit in the sections of the number line.



Section	Decimal	Equivalent Fraction
A		
B		
C		
D		

3) Each number has one or two decimal places. The digits are in the order shown. Place the decimal point in the correct place to make each number match the information.

a) The whole number is greater than 50:

9 8 2

b) There are more than four tenths. The whole number is greater than 10:

1 5 9

c) The tenths digit is greater than the ones digit and the whole number is less than 5:

3 4 5