



- 1) a) $\frac{6}{100}$, 0.06
b) $\frac{4}{100}$, 0.04
- 2) a) $\frac{3}{10} = \frac{30}{100} = 0.3$
b) $\frac{7}{10}$ and $\frac{2}{100} = \frac{72}{100} = 0.72$
- 3) $\frac{15}{10} = \frac{150}{100} = 1\frac{5}{10} = 1\frac{50}{100} = 1.5$



- 1) a) The first number line is divided into increments of one-tenth. The first fraction should be $\frac{2}{10}$.
b) The second number line is divided into increments of one-hundredth. The last fraction should be $\frac{69}{100}$.
- 2) Jia is incorrect. She has represented 2.04, not 2.4 with the place value counters. Hari is incorrect because he has mixed up the tenths and hundredths. His representation shows 1.43, not 1.34 using place value counters.
- 3) a) This statement is true.
b) This statement is false. It should be $\frac{3}{100}$, not $\frac{30}{100}$.



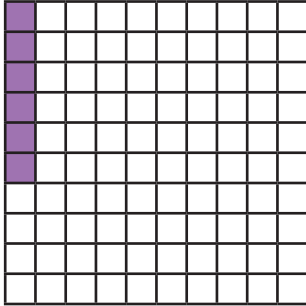
- 1) a) 18.32, 28.13, 38.12
b) $18\frac{32}{100}$, $28\frac{13}{100}$, $38\frac{12}{100}$
- 2) Bartek's number is between 2.33 and 2.39 so could be: 2.34, 2.36, 2.38
- 3) There are various possibilities. For example:
 $4 + 0.2 + 0.08$, $4\frac{28}{100}$, $4 + \frac{2}{10} + \frac{8}{100}$



Equivalent Fractions and Decimals (Hundredths)

1)

a) Write the fraction and decimal of the hundred square which is shaded.



fraction

decimal

b) Write the fraction and decimal represented by the counters.

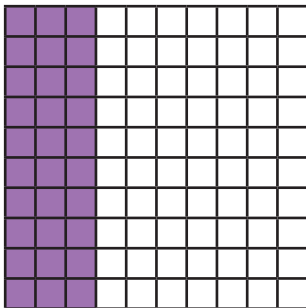


fraction

decimal

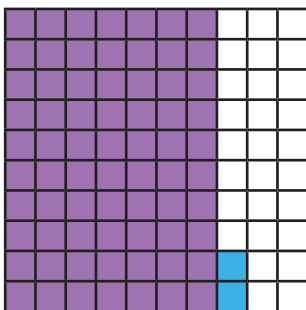
2) Write equivalent fractions and decimals for the shaded parts of the hundred squares.

a)



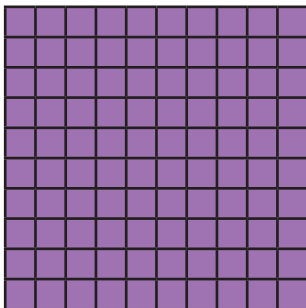
$\frac{\square}{10}$ and $\frac{\square}{100} = \square.$

b)

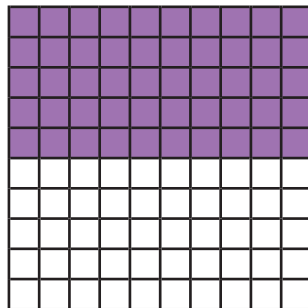


$\frac{\square}{10}$ and $\frac{\square}{100} = \frac{\square}{100} = \square.$

3) Write the fractions, mixed numbers and decimal represented by the hundred squares.



$\frac{\square}{10} = \frac{\square}{100}$

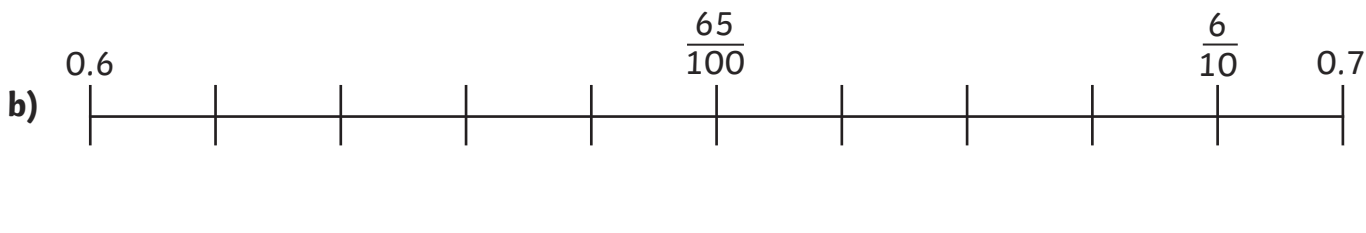
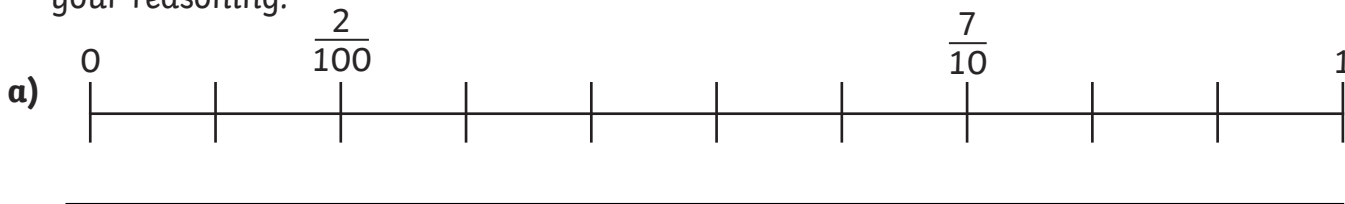


$\square \frac{\square}{10} = \square \frac{\square}{100} \square.$

Equivalent Fractions and Decimals (Hundredths)



1) Joseph has placed fractions on a number line. Can you spot any mistakes? Explain your reasoning.



2) Jia and Hari are representing fractions and decimals. Do you agree with their statements? Explain your answer.

I have represented 2.4 using place value counters.

Jia



I have represented 1.34 using place value counters.

Hari



3) Are the following number statements true or false? Prove it!

a) $2.43 = 2 + 0.4 + 0.03$

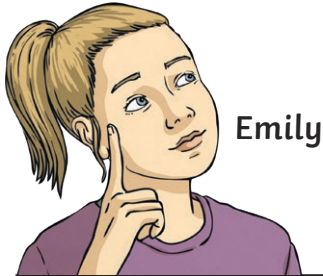
b) $4\frac{23}{100} = 4 + \frac{2}{10} + \frac{30}{100}$

Equivalent Fractions and Decimals (Hundredths)



1)

a) Emily has made a number with two decimal places using these four digits. Use the clues to work out what her number could be. You must use each digit once. Find all possibilities.



Emily

2

3

8

1

My number is less than 50.

The tenths digit is an odd number.

The digit with the smallest value is not a one.

The ones digit is greater than the hundredths digit.

b) Write each of the decimals as mixed numbers.

2) Bartek is thinking of a decimal number. What could his number be? Find three possibilities.



Bartek

$2 + 0.3 + 0.03$ is less than my number.
It is less than $2 + \frac{2}{10} + \frac{9}{100}$.
Its digits add up to an odd number.

3) Priya has represented the number 4.28 as:

4 ones + 2 tenths + 8 hundredths

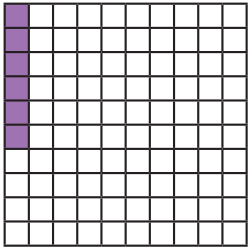
Represent 4.28 in three other ways.

Equivalent Fractions and Decimals (Hundredths)



1)

- a) Write the fraction and decimal of the hundred square which is shaded.



- b) Write the fraction and decimal represented by the counters.

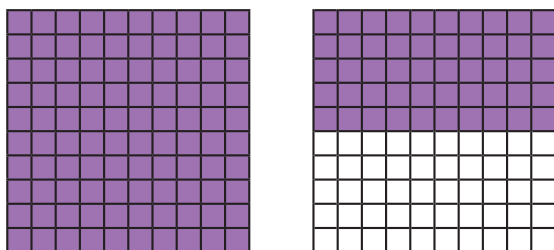


- 2) Write equivalent fractions and decimals for the shaded parts of the hundred squares.

a) $\frac{\square}{10} = \frac{\square}{100} = \square.$

b) $\frac{\square}{10}$ and $\frac{\square}{100} = \frac{\square}{100}$
 $= \square.$

- 3) Write the fractions, mixed numbers and decimal represented by the hundred squares.



$$\frac{\square}{10} = \frac{\square}{100}$$

$$\square \frac{\square}{10} = \square \frac{\square}{100}$$

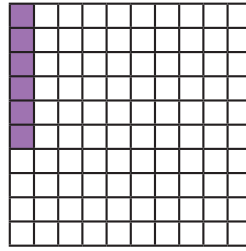
$$\square.$$

Equivalent Fractions and Decimals (Hundredths)



1)

- a) Write the fraction and decimal of the hundred square which is shaded.



- b) Write the fraction and decimal represented by the counters.

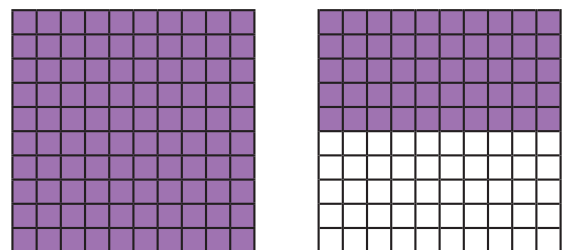


- 2) Write equivalent fractions and decimals for the shaded parts of the hundred squares.

a) $\frac{\square}{10} = \frac{\square}{100} = \square.$

b) $\frac{\square}{10}$ and $\frac{\square}{100} = \frac{\square}{100}$
 $= \square.$

- 3) Write the fractions, mixed numbers and decimal represented by the hundred squares.



$$\frac{\square}{10} = \frac{\square}{100}$$

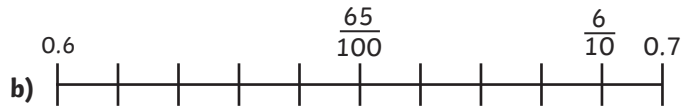
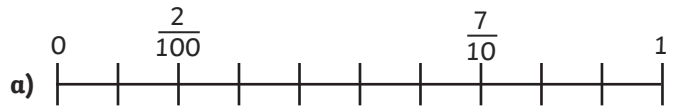
$$\square \frac{\square}{10} = \square \frac{\square}{100}$$

$$\square.$$

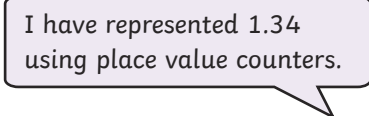
Equivalent Fractions and Decimals (Hundredths)



- 1) Joseph has placed fractions on a number line. Can you spot any mistakes? Explain your reasoning.



- 2) Jia and Hari are representing fractions and decimals. Do you agree with their statements? Explain your answer.



- 3) Are the following number statements true or false? Prove it!

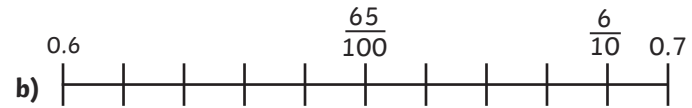
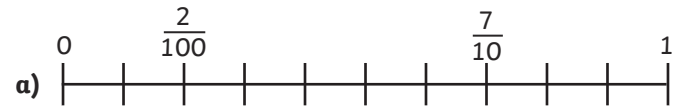
a) $2.43 = 2 + 0.4 + 0.03$

b) $4 \frac{23}{100} = 4 + \frac{2}{10} + \frac{30}{100}$

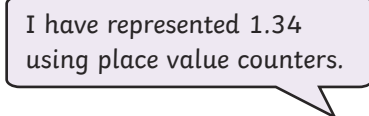
Equivalent Fractions and Decimals (Hundredths)



- 1) Joseph has placed fractions on a number line. Can you spot any mistakes? Explain your reasoning.



- 2) Jia and Hari are representing fractions and decimals. Do you agree with their statements? Explain your answer.



- 3) Are the following number statements true or false? Prove it!

a) $2.43 = 2 + 0.4 + 0.03$

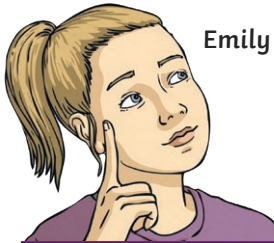
b) $4 \frac{23}{100} = 4 + \frac{2}{10} + \frac{30}{100}$

Equivalent Fractions and Decimals (Hundredths)

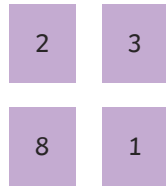


1)

- a) Emily has made a number with two decimal places using these four digits. Use the clues to work out what her number could be. You must use each digit once. Find all possibilities.



Emily



My number is less than 50.

The tenths digit is an odd number.

The digit with the smallest value is not a one.

The ones digit is greater than the hundredths digit.

- b) Write each of the decimals as mixed numbers.

- 2) Bartek is thinking of a decimal number. What could his number be? Find three possibilities.



Bartek

$2 + 0.3 + 0.03$ is less than my number.
It is less than $2 + \frac{3}{10} + \frac{9}{100}$.
Its digits add up to an odd number.

- 3) Priya has represented the number 4.28 as:

4 ones + 2 tenths + 8 hundredths

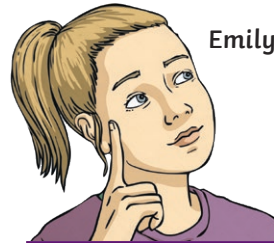
Represent 4.28 in three other ways.

Equivalent Fractions and Decimals (Hundredths)

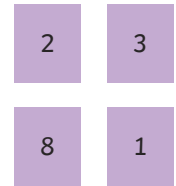


1)

- a) Emily has made a number with two decimal places using these four digits. Use the clues to work out what her number could be. You must use each digit once. Find all possibilities.



Emily



My number is less than 50.

The tenths digit is an odd number.

The digit with the smallest value is not a one.

The ones digit is greater than the hundredths digit.

- b) Write each of the decimals as mixed numbers.

- 2) Bartek is thinking of a decimal number. What could his number be? Find three possibilities.



Bartek

$2 + 0.3 + 0.03$ is less than my number.
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- 3) Priya has represented the number 4.28 as:

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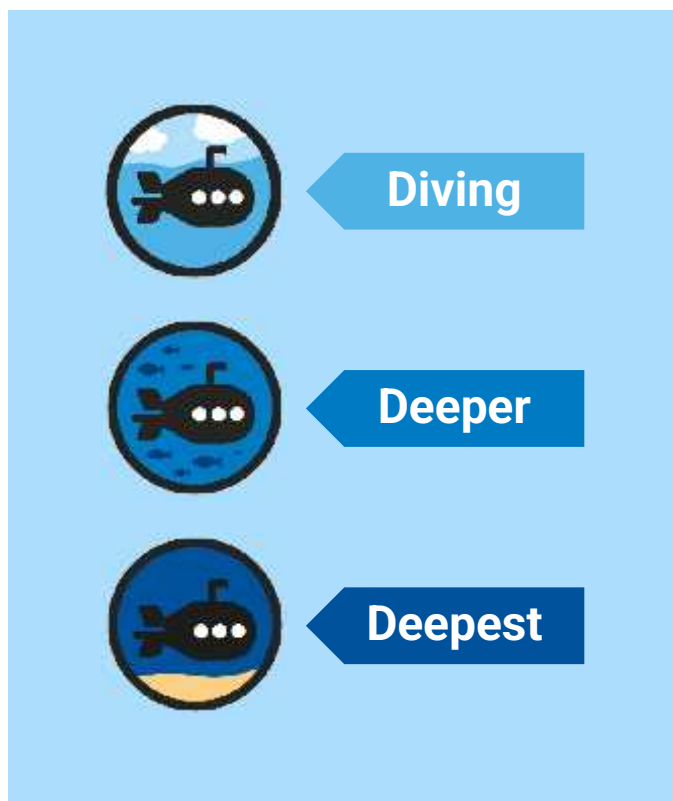
Represent 4.28 in three other ways.



Equivalent Fractions and Decimals (Hundredths)

Diving into Mastery Guidance for Educators

Each activity sheet is split into three sections, diving, deeper and deepest, which are represented by the following icons:



These carefully designed activities take your children through a learning journey, initially ensuring they are fluent with the key concept being taught; then applying this to a range of reasoning and problem-solving activities.

These sheets might not necessarily be used in a linear way. Some children might begin at the 'Deeper' section and in fact, others may 'dive straight in' to the 'Deepest' section if they have already mastered the skill and are applying this to show their depth of understanding.

National Curriculum Aim

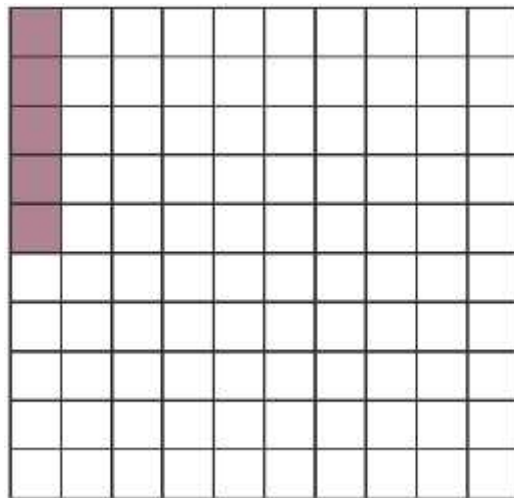
Read and write decimal numbers as fractions

Equivalent Fractions and Decimals (Hundredths)

Diving



Write the fraction and decimal of the hundred square which is shaded.



fraction

$$\frac{5}{100}$$

decimal

$$0.05$$

Write the fraction and decimal represented by the counters.



fraction

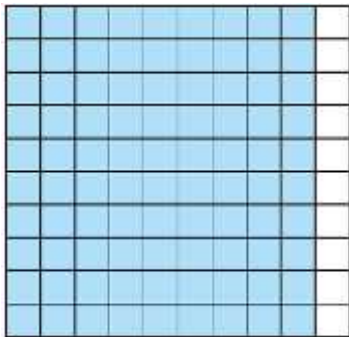
$$\frac{7}{100}$$

decimal

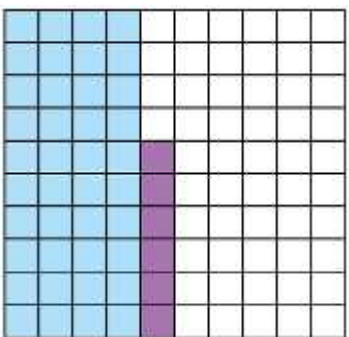
$$0.07$$



Write equivalent fractions and decimals for the shaded parts of the hundred squares.



$$\frac{\boxed{9}}{10} = \frac{\boxed{90}}{100} = \boxed{0.9}$$



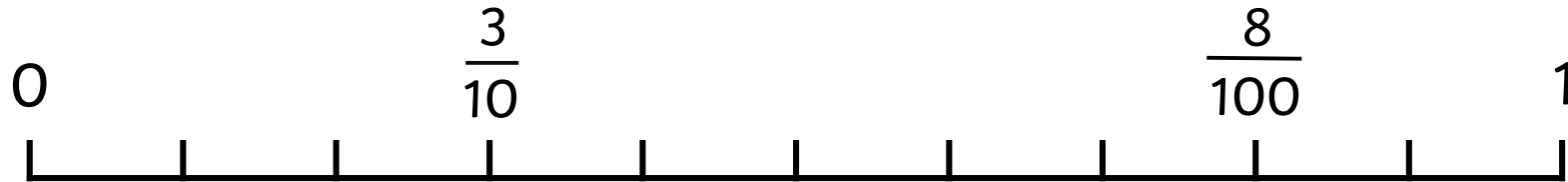
$$\frac{\boxed{4}}{10} \text{ and } \frac{\boxed{6}}{100} = \frac{\boxed{46}}{100} = \boxed{0.46}$$

Equivalent Fractions and Decimals (Hundredths)

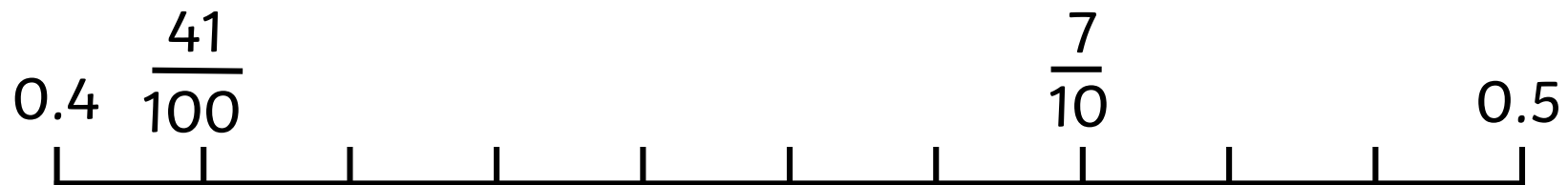
Deeper



Joseph has placed fractions on a number line.
Can you spot any mistakes? Explain your reasoning.



The number line is divided into increments of one-tenth.
The second fraction should be $\frac{8}{10}$.

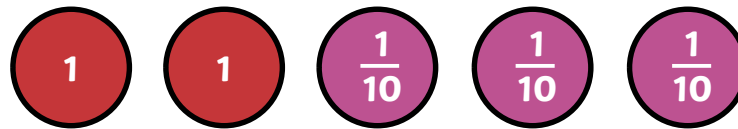


The number line is divided into increments of one-hundredth.
The second fraction should be $\frac{47}{100}$.



Jia and Hari are representing fractions and decimals. Do you agree with their statements? Explain your answer.

Jia



I have represented 2.03 using place value counters.

Jia is incorrect.
She has represented 2.3, not 2.03 with the place value counters.

Hari



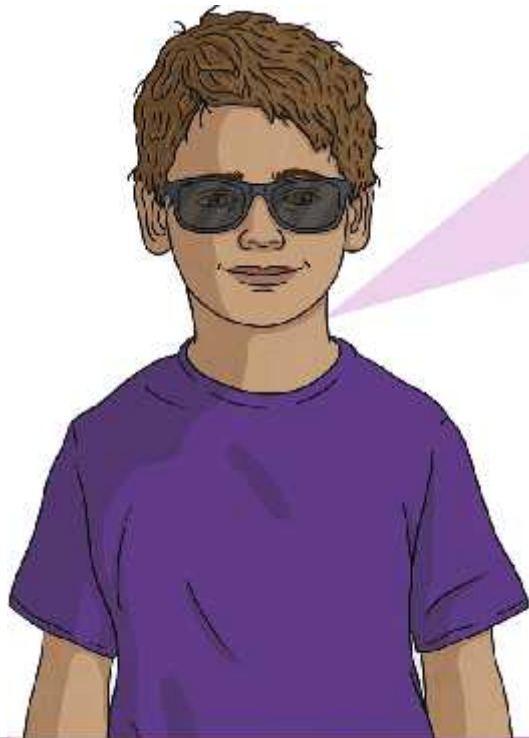
I have represented 1.23 using place value counters.

Hari is correct.



Bartek is thinking of a decimal number. What could his number be? Find three possibilities.

Bartek



$5 + 0.2 + 0.02$ is less than my number.

It is less than $5 + \frac{2}{10} + \frac{9}{100}$.

Its digits add up to an even number.

**Bartek's number is between
5.23 and 5.28 so could be: 5.23,
5.25, 5.27**

