Day 1 - Maths

Summer Term Week 7
(w/c 8th June)

1. We are working on:

2. Then find the lesson you are on -

Decimals as fractions

3. Watch the video on:

https://vimeo.com/425602384

Year 6
BRONZE PACK

4. You will need a pencil  and paper  to help work out the answers

. Watch the video and practice as you go along

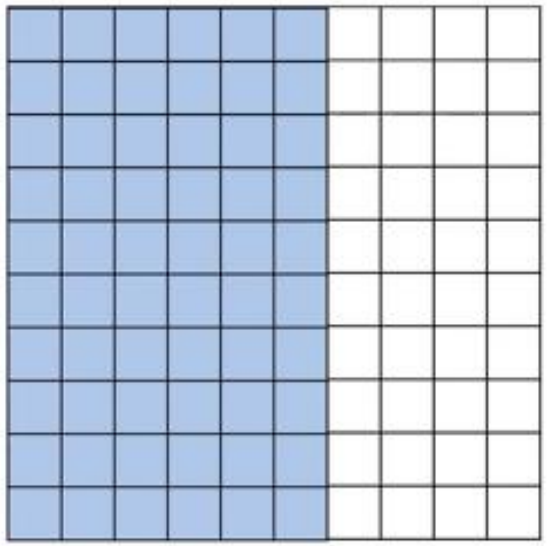
(read through the slides practice as you go along)

6. Have a go  At the end of the video or slides, answer the questions that are in your pack

Lesson 1

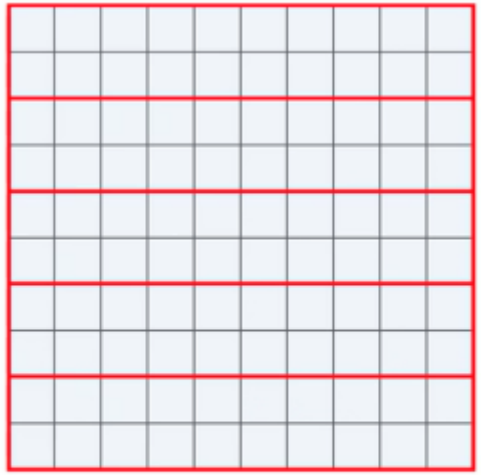
USE THIS SHEET TO LEARN FROM

Decimals as fractions https://vimeo.com/425602384



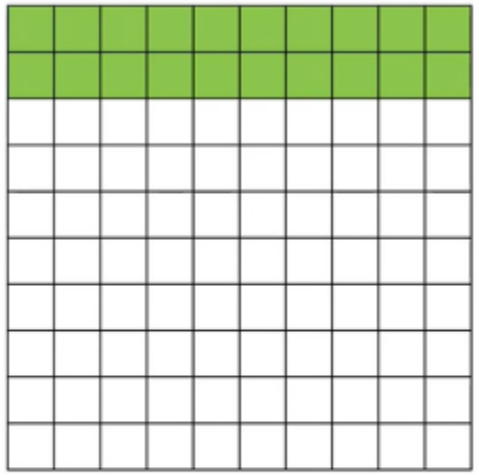
$\frac{60}{100}$ are equal to $\frac{6}{10}$

60 squares out of 100 have been shaded.
As a fraction, it is 60/100 which is EQUAL to 6/10.



$\frac{1}{5}$

This 100 grid has been divided into 5 sections.



$\frac{1}{5} = \frac{2}{10} = 0.2$

Notice how each of the 5 sections has TWO rows of TEN. We can show this as a fraction 2/10

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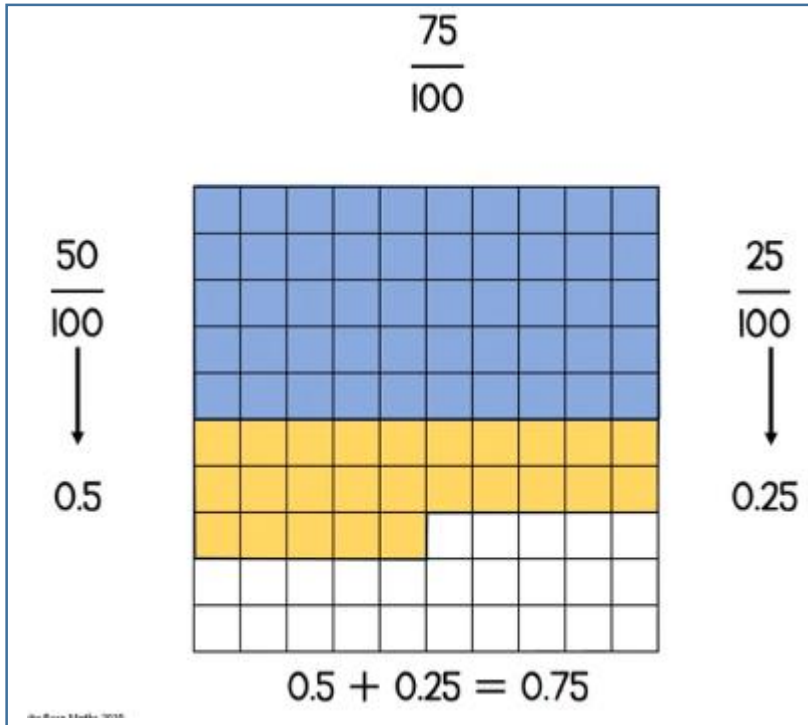
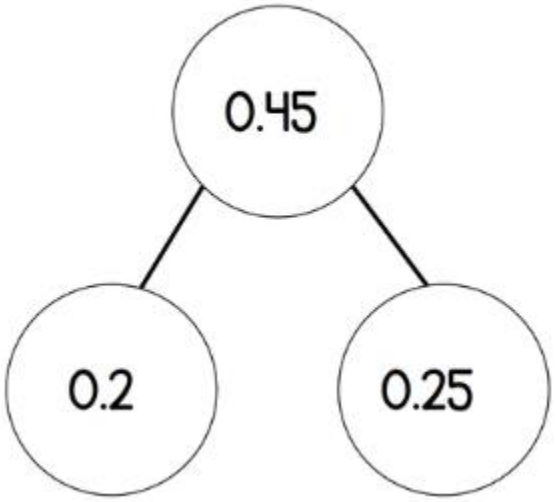


We can partition the grid into smaller sections.

Here is just ONE example of how we can partition 75.

Each partitioned section was converted into a decimal and then added together to get the final answer.

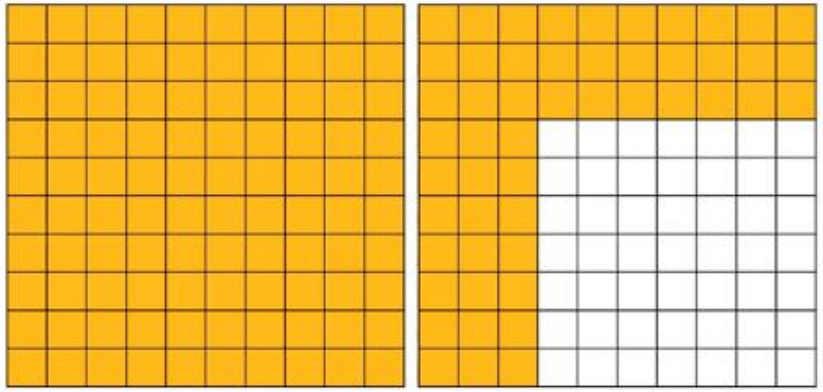
So, 75/100 as a decimal is 0.75



Here is an example of 0.45 that was partitioned.

Here we have a 100 grid that has been completely shaded. This is equal to ONE

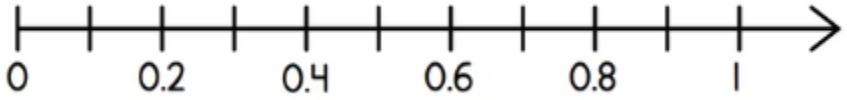
This grid has 51 squares shaded. That's 51/100 as a fraction. It is 0.51 as a decimal



This grid represents 1

This grid represents $\frac{51}{100}$ or 0.51

Answer >> Both grids together represent $1\frac{51}{100}$ or 1.51



The difference between 0 and 1 is 1.

There are 10 parts shows on the number line.

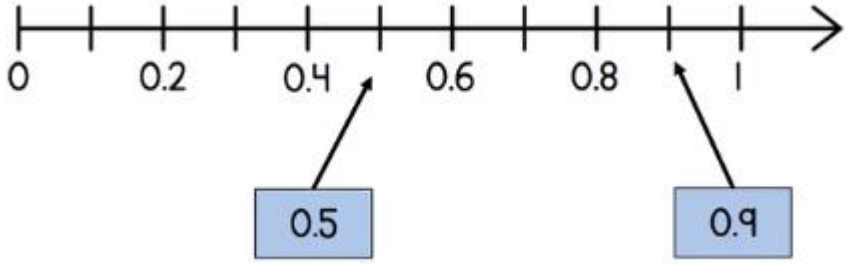
So, we divided 1 by 10 which is 0.1.

Each interval is worth 0.1

1

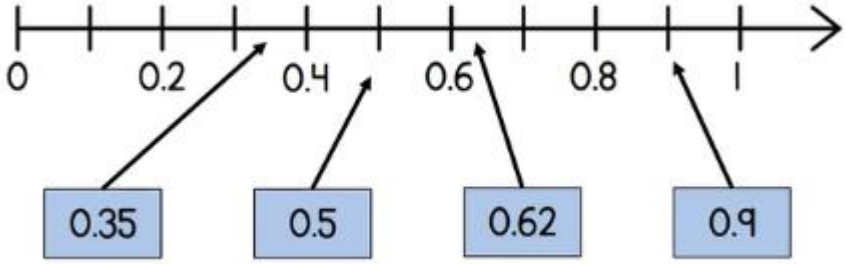
Here is where 0.5 and 0.9 would be placed

2

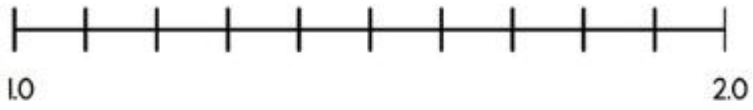


0.35 and 0.62 are placed here.
Have a go at marking 0.73 on the number line.

3



USE THIS SHEET TO LEARN FROM



What does each interval represent?

Where is 1.1 on the number line?

Use the previous page to help you understand this one.

Have a go at adding 1.33.

How is the fraction $\frac{320}{100}$ written as a decimal?

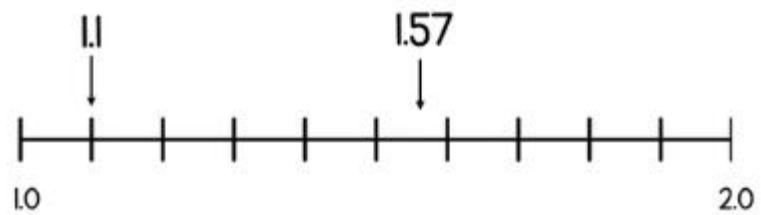
300 hundredths = 3

20 hundredths = 0.20 = 0.2

$\frac{320}{100} = 3.2$

1

2



What does each interval represent?

Where is 1.1 on the number line?

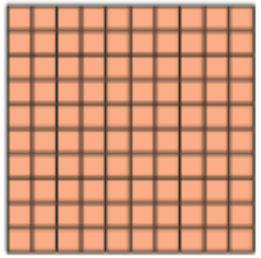
Where is 1.57 on the number line?

USE THIS SHEET TO LEARN FROM

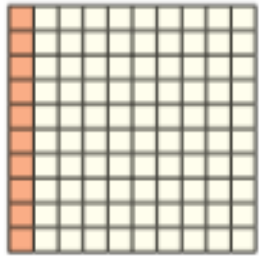
Lesson 1 Questions

Decimals as fractions (2)

1 This grid represents 1

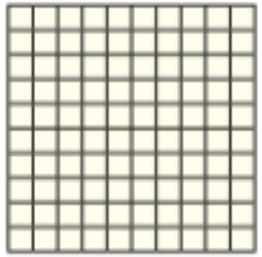


This grid represents 0.1 or $\frac{10}{100}$ or $\frac{1}{10}$

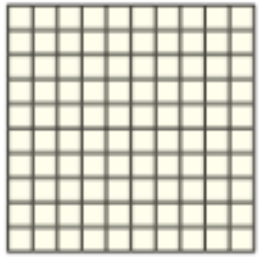


Colour the hundred squares to represent the fractions.

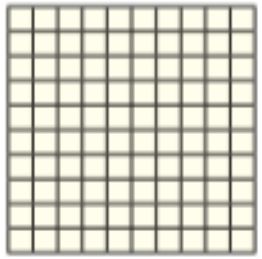
a) $\frac{2}{100}$



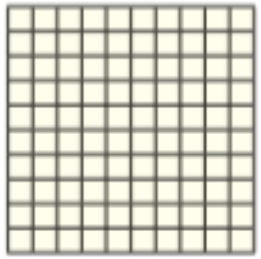
c) $\frac{20}{100}$



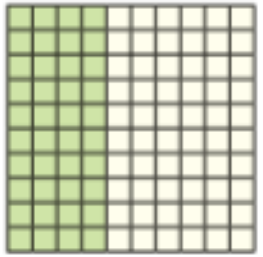
b) $\frac{2}{10}$



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



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



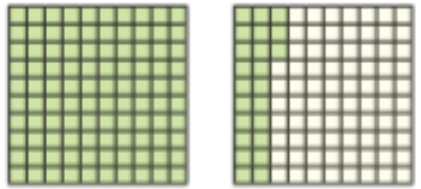
$\frac{\square}{100}$

$\frac{\square}{10}$

0.__

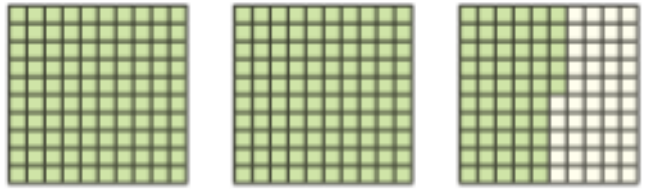
3 What fractions and decimals are represented?

a)



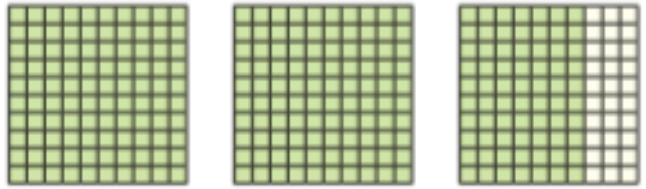
$1\frac{23}{100} = \square$

b)



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

c)

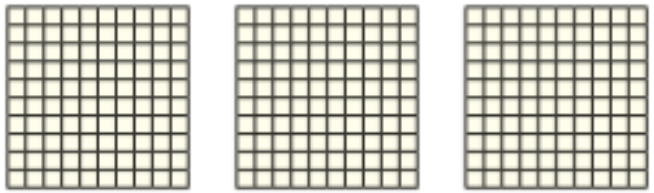


$\square\ \frac{\square}{10} = \square$

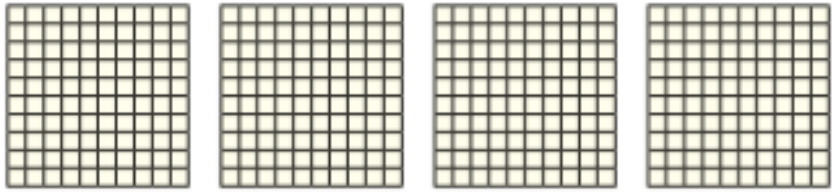
Lesson 1 Questions

4

a) Represent 2.15

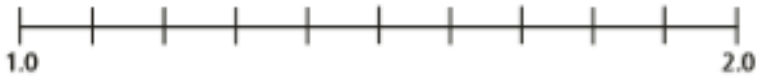


b) Represent $3\frac{7}{10}$



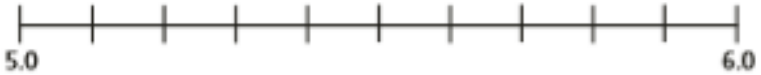
5 a) Label the number line with the decimals.

1.3	1.6	1.85	1.98



b) Label the number line with the fractions.

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



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		$4\frac{\square}{100}$		
	5 + 0.6 + 0.02			
				8 ones and 2 hundredths

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

a) 32.6 = $\square\frac{\square}{10}$

b) 2.03 = $\square\frac{\square}{100}$

c) 13.08 = $\square\frac{\square}{100}$

d) 3.98 = $\square\frac{\square}{100}$

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

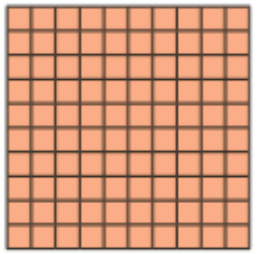
		.	0	

How many different numbers can you make?

Lesson 1 Answers

Decimals as fractions (2)

1 This grid represents 1



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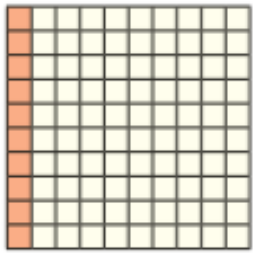

Colour the hundred squares to represent the fractions.

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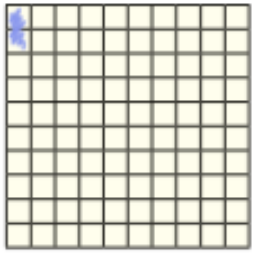
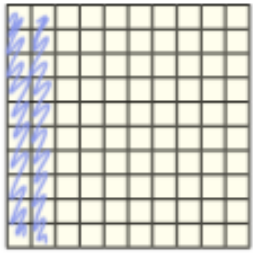
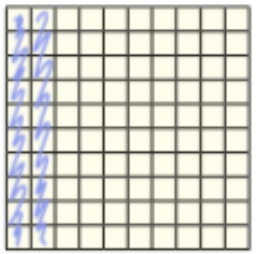


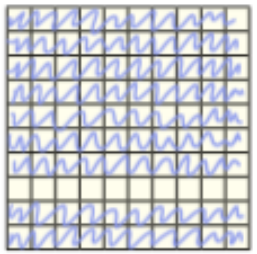
c) $\frac{20}{100}$



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



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



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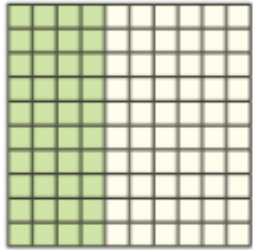


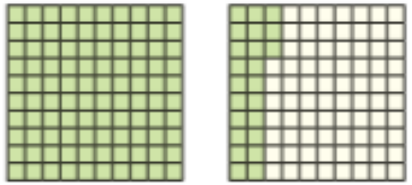
$\frac{40}{100}$

$\frac{4}{10}$

0.4

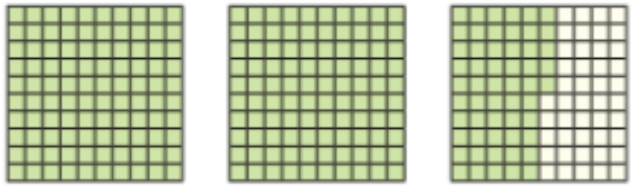
3 What fractions and decimals are represented?

a)



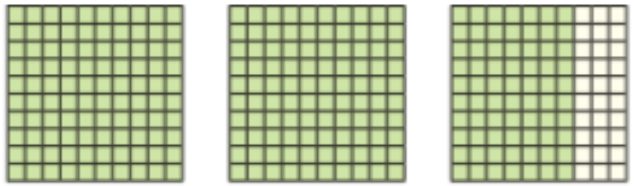
$1\frac{23}{100} = 1.23$

b)



$2\frac{55}{100} = 2.55$

c)

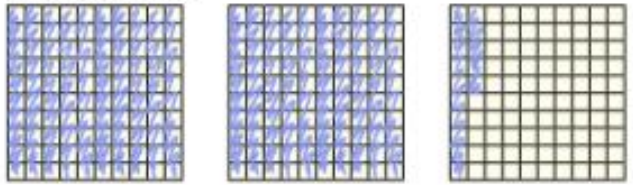


$2\frac{7}{10} = 2.7$

Lesson 1 Answers

4

a) Represent 2.15



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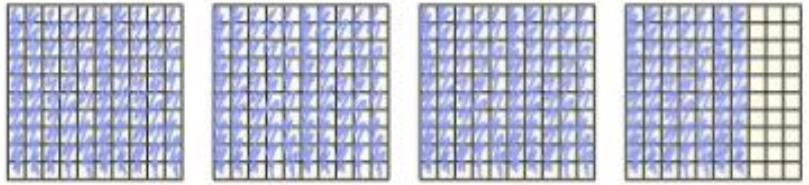

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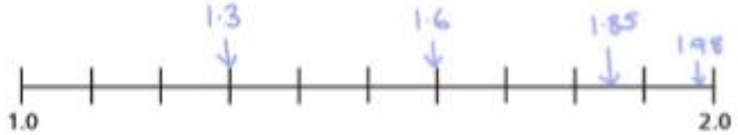
1.3 | 1.6 | 1.85 | 1.98



b) Label the number line with the fractions.

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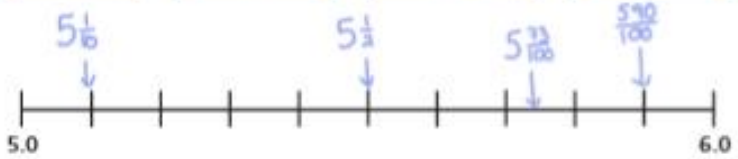

6 Complete the table.

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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	$8\frac{3}{100}$	$8 + \frac{2}{100}$	8 ones and 2 hundredths

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 $\frac{98}{100}$

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?

Day 2 - Maths

Summer Term Week 7
(w/c 8th June)

1. We are working on:

2. Then find the lesson you are on - Understand thousandths

3. Watch the video on: https://vimeo.com/425602576

4. You will need a pencil  and paper  to help work out the answers

. Watch the video and practice as you go along

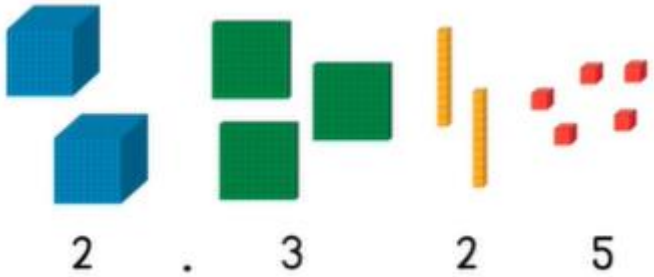
(read through the slides practice as you go along)

6. Have a go  At the end of the video or slides, answer the questions that are in your pack

USE THIS SHEET TO LEARN FROM

 = 1 whole  = $\frac{1}{10}$ or 0.1

 = $\frac{1}{100}$ or 0.01  = $\frac{1}{1000}$ or 0.001



We can write this number as

$1.448 = 1 + 0.4 + 0.04 + 0.008$

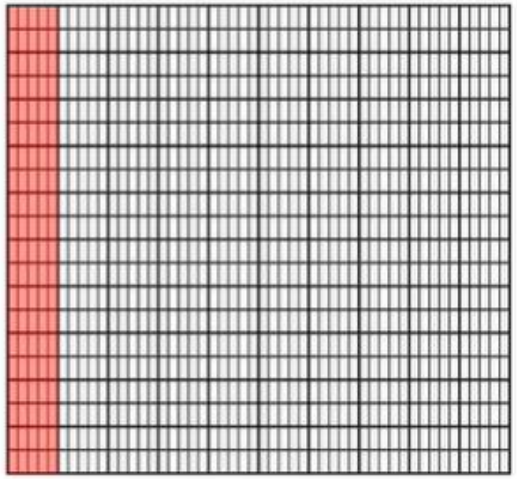
The number is 1.448

The number is 3.093

USE THIS SHEET TO LEARN FROM Each tiny square is worth one thousandth

Here is a thousand square.

$\frac{100}{1000} = \frac{1}{10}$

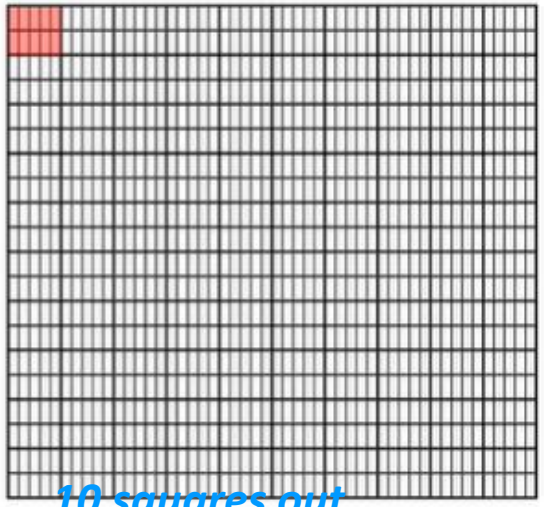


0.1

100 squares out of 1000 are shaded here

Here is a thousand square.

$\frac{10}{1000} = \frac{1}{100}$



0.01

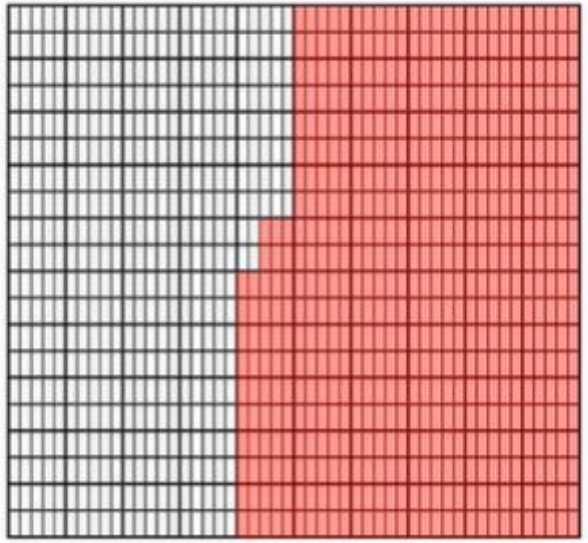
10 squares out of 1000 are shaded here

556 squares out of 1000 have been shaded here

What fraction of the square has been shaded?

Write this fraction as a decimal.

$\frac{556}{1000} = 0.556$

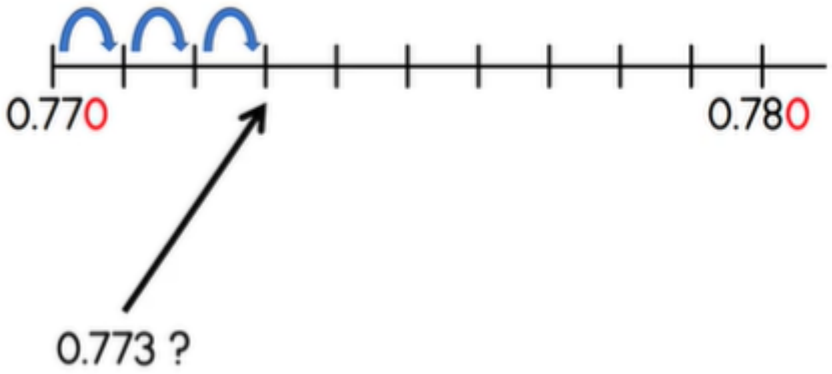


Mo wants to represent the number 4.013 on the place value grid.

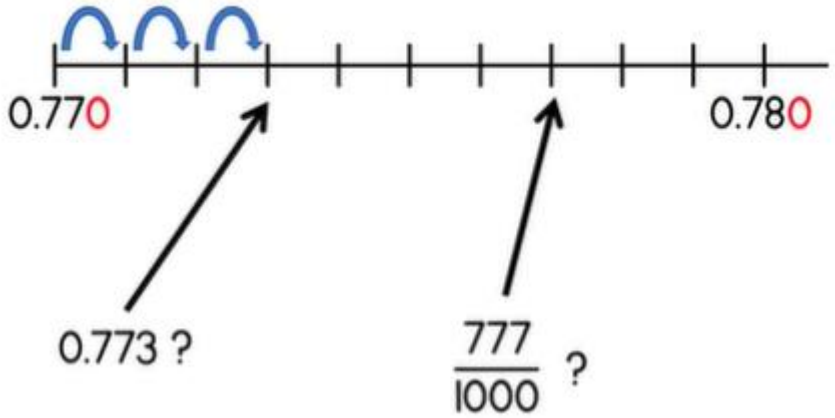
Ones	Tenths	Hundredths	Thousandths
1 1 1 1		0.01	0.001 0.001 0.001
4	0	1	3

Mo has used his counters to help him write out the number 4.013.

He made sure the numbers were in the correct column so their value is correct



We can add **0** to the numbers at the end of the number line to help us. It does have any value in this number but it can help us clearly see.



USE THIS SHEET TO LEARN FROM

USE THIS SHEET TO LEARN FROM

$$\frac{3}{10} + \frac{7}{100} + \frac{1}{1000} = 0.371$$

$\frac{3}{10}$ = 3 tenths = 0.3

$\frac{7}{100}$ = 7 hundredths = 0.07

$\frac{1}{1000}$ = 1 thousandth = 0.001

$$\frac{4}{1000} + \frac{9}{10} = 0.904$$

$\frac{9}{10}$ = 9 tenths = 0.9

0 hundredths

$\frac{4}{1000}$ = 4 thousandths = 0.004

Here we are adding fractions.

We can easily add them by converting them into decimals first.

If you are unsure, draw a place value grid like Mo has on the previous page.

Lesson 2 Questions

Understand thousandths

Rose Maths

1 Tommy is using base 10 to represent decimals.

He uses  to represent 1 whole.

He uses  to represent $\frac{1}{10}$ or 0.1

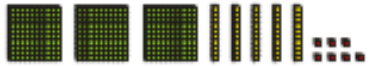
He uses to represent $\frac{1}{100}$ or 0.01

He uses to represent $\frac{1}{1000}$ or 0.001

What decimals are represented?

a) 

b) 

c) 

2 a) Represent each number using base 10

0.512 1.352 2.003

b) Use your representations to help you complete the statements.

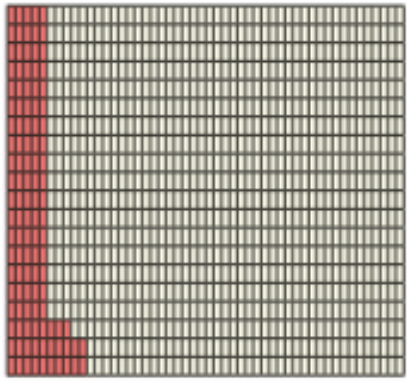
0.512 = 0.5 + 0.01 + ☐

1.352 = 1 + ☐ + ☐ + ☐

2.003 = _____

3 Here is a thousand square.

Part of the square has been coloured.



a) Why do you think it is called a thousand square?

_____

b) What fraction of the square has been coloured? $\frac{\square}{1000}$

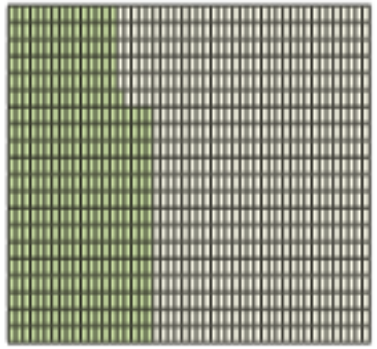
c) Write the fraction as a decimal. ☐

Lesson 2 Questions

4 What fraction of each square has been shaded?

Write each number as a fraction and as a decimal.

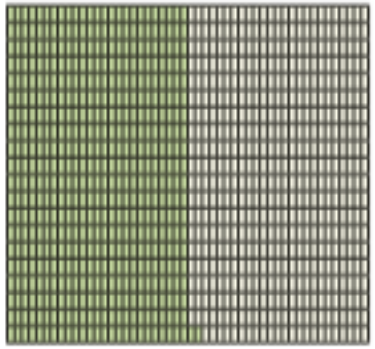
a)



fraction = ☐

decimal = ☐

b)

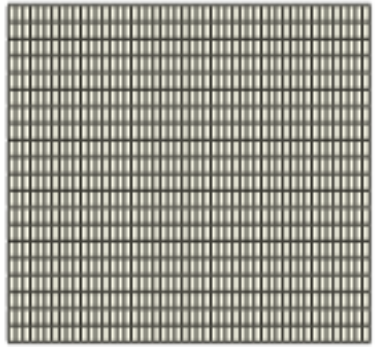


fraction = ☐

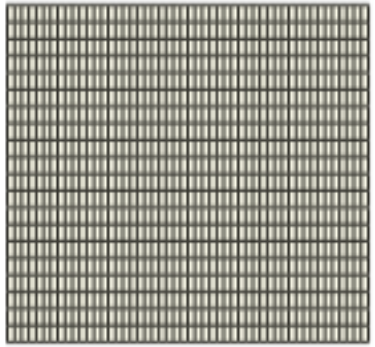
decimal = ☐

5 Colour the grids to represent the fraction and decimal.

a) $\frac{73}{1000}$



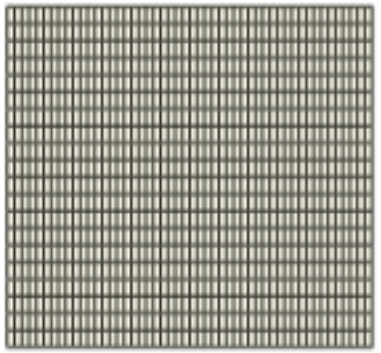
b) 0.302



6 Represent these numbers on a place value chart.

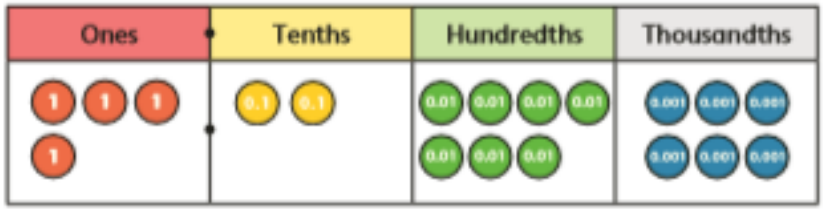
a) 1.372 b) 0.091 c) 3.542

7 Show that $\frac{400}{1000}$ is the same as 0.4



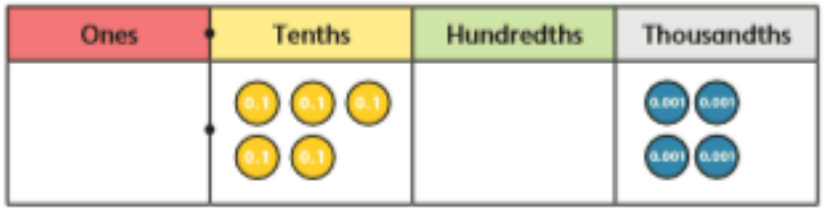
8 Write the numbers represented by the place value charts.

a)



☐

b)

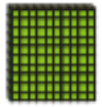


☐

Lesson 2 Answers

1 Tommy is using base 10 to represent decimals.

He uses  to represent 1 whole.

He uses  to represent $\frac{1}{10}$ or 0.1

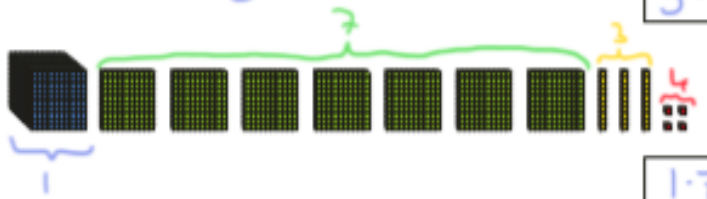
He uses to represent $\frac{1}{100}$ or 0.01

He uses  to represent $\frac{1}{1000}$ or 0.01

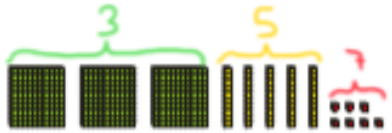
What decimals are represented?

a) 

5·321

b) 

1·734

c) 

0·357

b) Use your representations to help you complete the statements.

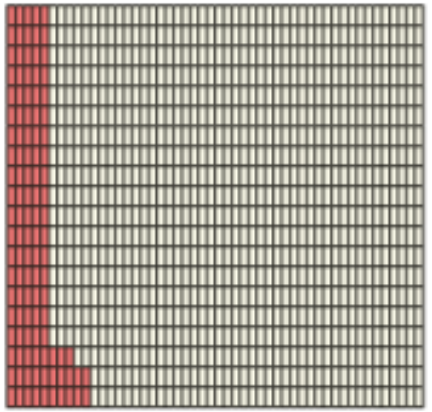
0.512 = 0.5 + 0.01 + 0·002

1.352 = 1 + 0·3 + 0·05 + 0·002

2.003 = 2 + 0·003

3 Here is a thousand square.

Part of the square has been coloured.



a) Why do you think it is called a thousand square?

It is split into one thousand equal parts.

b) What fraction of the square has been coloured? $\frac{113}{1000}$

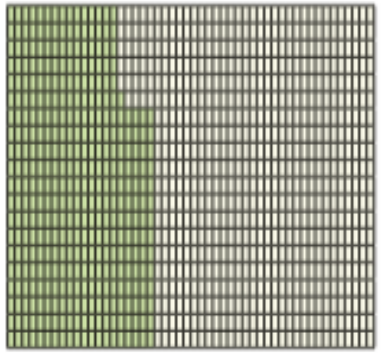
c) Write the fraction as a decimal. 0·113

Lesson 2 Answers

4 What fraction of each square has been shaded?

Write each number as a fraction and as a decimal.

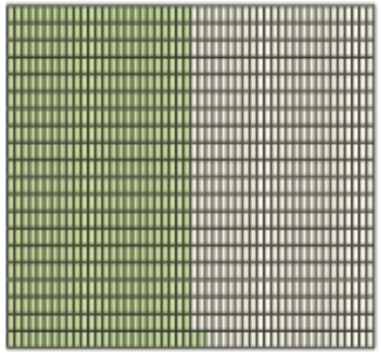
a)



fraction = $\frac{371}{1000}$

decimal = 0·371

b)

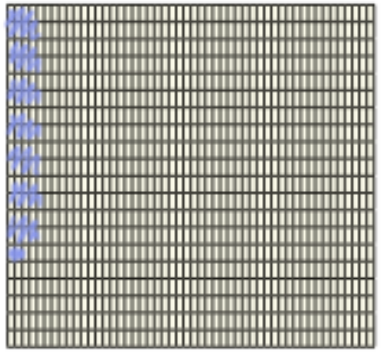


fraction = $\frac{502}{1000}$

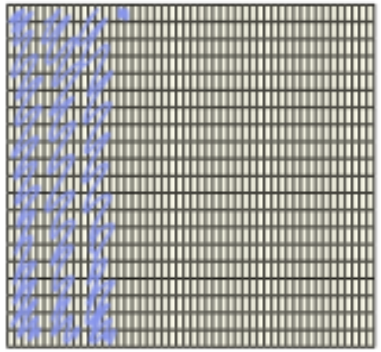
decimal = 0·502

5 Colour the grids to represent the fraction and decimal.

a) $\frac{73}{1000}$



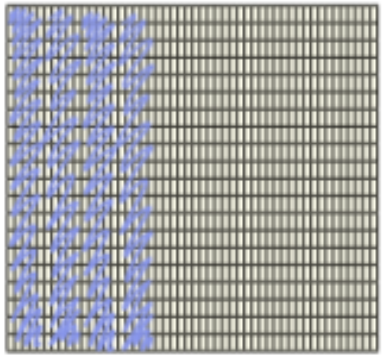
b) 0.302



6 Represent these numbers on a place value chart.

a) 1.372 **b)** 0.091 **c)** 3.542

7 Show that $\frac{400}{1000}$ is the same as 0.4



400 out of 1,000 equal parts = $\frac{400}{1000}$

4 out of 10 equal columns = $\frac{4}{10}$ = 0.4

8 Write the numbers represented by the place value charts.

a)

Ones	Tenths	Hundredths	Thousandths
1 1 1 1	0.1 0.1	0.01 0.01 0.01 0.01 0.01 0.01 0.01	0.001 0.001 0.001 0.001 0.001 0.001

4·276

b)

Ones	Tenths	Hundredths	Thousandths
	0.1 0.1 0.1 0.1 0.1		0.001 0.001 0.001 0.001

0·504

Day 3 Maths

Summer Term Week 7
(w/c 8th June)

1. We are working on:

2. Then find the lesson you are on - Rounding decimals

3. Watch the video on: https://vimeo.com/425603173

4. You will need a pencil  and paper  to help work out the answers

. Watch the video and practice as you go along

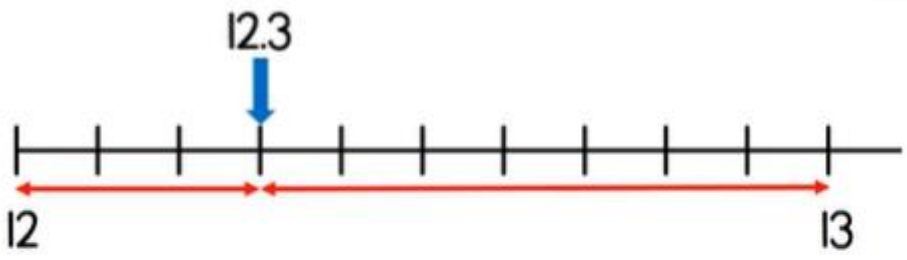
(read through the slides practice as you go along)

6. At the end of the video or slides, answer the questions that are in your pack

Have a go 

USE THIS SHEET TO LEARN FROM

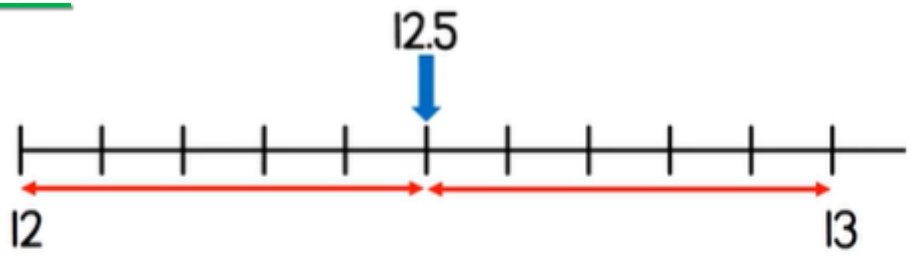
Remember:
5 TO THE SKY
4 TO THE FLOOR



The nearest whole number to 12.3 is ___12___

We can see that 12.3 is CLOSER to 12 than it is 13.

So, we round 12.3 DOWN to 12.

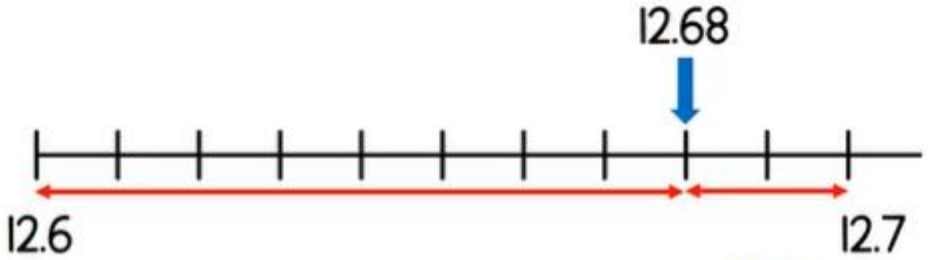


12.5 rounded to the nearest whole number is ___13___

Here, 12.5 is in the middle of 12 and 13.

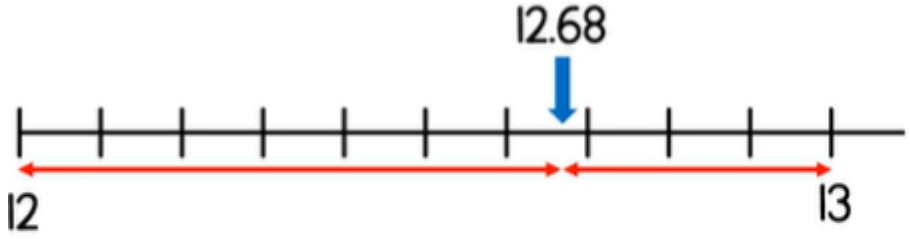
So, whenever a number end in 5 and we are rounding, we always round up!

USE THIS SHEET TO LEARN FROM



The nearest tenth to 12.68 is __12.7__

12.68 rounded to 1 decimal place is __12.7__



The nearest whole number to 12.68 is __13__

Here we can see that 12.68 is CLOSER to 12.7.

Remember, we look at the number we are rounding to.

Then we look at the number to the RIGHT of it.

5 and above we round the number to the left up
and if it is 4 or smaller, we round the number to the left down.

12.68 --> We are looking at the **tenths.** The number which represents the tenth in this number is the 6.
We look to the right of that number. We have 8.
So, we round the 6 on the left UP to 7. ***12.7 is our answer***.

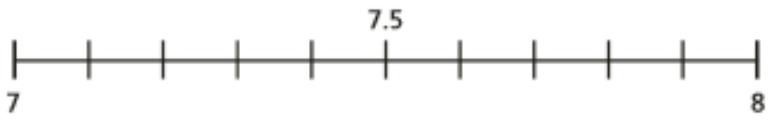
Lesson 3Questions

Rounding decimals

1 Show the position of each number on the number line.

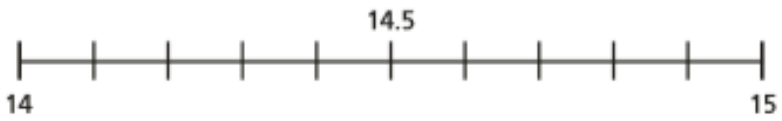
Use the number line to round these decimals to the nearest whole number.

a) 7.2



The nearest whole number is ☐

b) 14.8



The nearest whole number is ☐

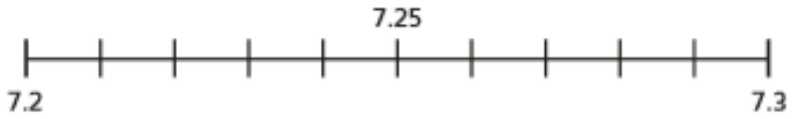
c) 6.5

The nearest whole number is ☐

Explain to a partner how to round decimal numbers to the nearest whole number.

2 Use the number line to round these decimal numbers to the nearest tenth and the nearest whole number.

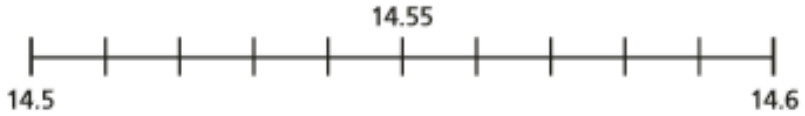
a) 7.23



The nearest tenth is ☐

The nearest whole number is ☐

b) 14.56



The nearest tenth is ☐

The nearest whole number is ☐

c) 6.45

The nearest tenth is ☐

The nearest whole number is ☐

Explain to a partner how to round decimal numbers to one decimal place.

Lesson 3 Questions

3 a) When rounding to the nearest tenth, how many digits will there be after the decimal point? ☐

b) Round each number to one decimal place.

1.33	☐	4.03	☐
1.34	☐	4.04	☐
1.35	☐	4.05	☐
1.36	☐	4.06	☐
1.37	☐	4.07	☐

4 Round each number to the nearest tenth.

a) 4.21	☐	d) 11.86	☐	g) 12.92	☐
b) 8.09	☐	e) 5.67	☐	h) 10.65	☐
c) 4.84	☐	f) 0.15	☐		

5 Circle each decimal that rounds to 6.2

6.32 **6.23** **6.27** **6.17** **6.12** **6.25**

Explain your reasoning.

_____

_____

6 Here are the weights in kilograms of some parcels.

3.48 kg 1.42 kg 10.65 kg 1.03 kg

a) Round the weight of each parcel to 1 decimal place.

☐ kg ☐ kg ☐ kg ☐ kg

b) The weight of each parcel has been rounded to the nearest 100g.

Is this true or false? _____

Talk about it with a partner.

7 Amir is thinking of a number.

Rounded to the nearest whole his number is 5

Rounded to the nearest tenth his number is 4.8

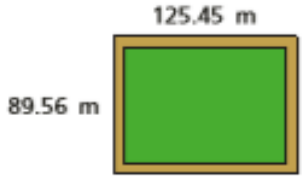
Write at least four different numbers that Amir could be thinking of.

_____

_____

8 A farmer is building a new fence for her sheep field.

Here are the measurements.



She wants to build a fence around the whole field.

Estimate how much fencing you think she will need.

Talk about your estimate with a partner.

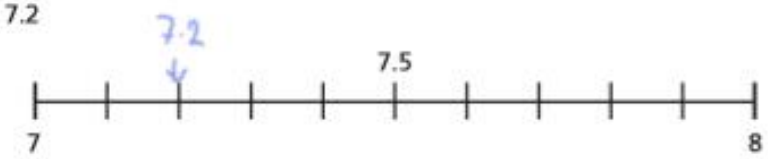
Lesson 3
Answers

Rounding decimals

1 Show the position of each number on the number line.

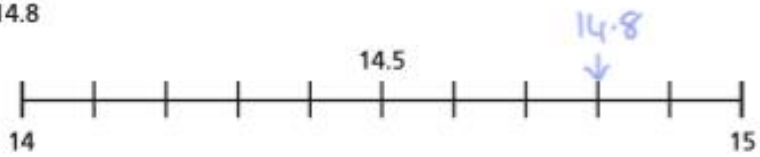
Use the number line to round these decimals to the nearest whole number.

a) 7.2



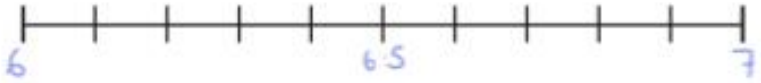
The nearest whole number is 7

b) 14.8



The nearest whole number is 15

c) 6.5

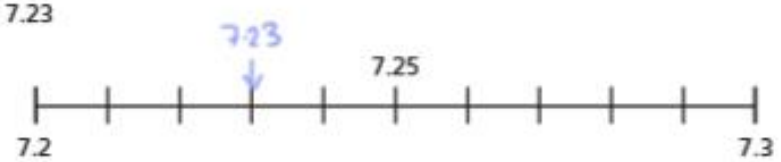


The nearest whole number is 7

Explain to a partner how to round decimal numbers to the nearest whole number.

2 Use the number line to round these decimal numbers to the nearest tenth and the nearest whole number.

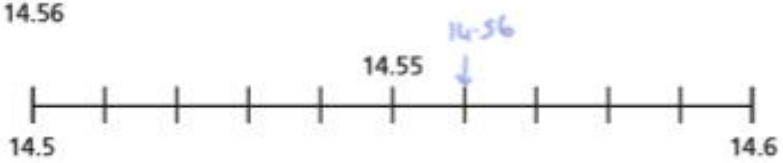
a) 7.23



The nearest tenth is 7.2

The nearest whole number is 7

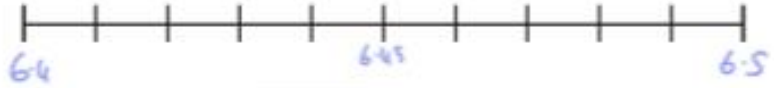
b) 14.56



The nearest tenth is 14.6

The nearest whole number is 15

c) 6.45



The nearest tenth is 6.5

The nearest whole number is 6

Explain to a partner how to round decimal numbers to one decimal place.

Lesson 3
Answers

3 a) When rounding to the nearest tenth, how many digits will there be after the decimal point? [1]

b) Round each number to one decimal place.

1.33	1·3	4.03	4·0
1.34	1·3	4.04	4·0
1.35	1·4	4.05	4·1
1.36	1·4	4.06	4·1
1.37	1·4	4.07	4·1

4 Round each number to the nearest tenth.

a) 4.21	4·2	d) 11.86	11·9	g) 12.92	12·9
b) 8.09	8·1	e) 5.67	5·7	h) 10.65	10·7
c) 4.84	4·8	f) 0.15	0·2		

5 Circle each decimal that rounds to 6.2

6.32 (6.23) 6.27 (6.17) 6.12 6.25

Explain your reasoning.

They are greater than 6·15 but less than 6·25

6 Here are the weights in kilograms of some parcels.

3.48 kg 1.42 kg 10.65 kg 1.03 kg

a) Round the weight of each parcel to 1 decimal place.

[3·5] kg [1·4] kg [10·7] kg [1·0] kg

b) The weight of each parcel has been rounded to the nearest 100g.

Is this true or false? true

Talk about it with a partner.

7 Amir is thinking of a number.

Rounded to the nearest whole his number is 5

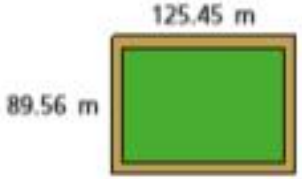
Rounded to the nearest tenth his number is 4.8

Write at least four different numbers that Amir could be thinking of.

e.g. 4·75, 4·79, 4·81, 4·84

8 A farmer is building a new fence for her sheep field.

Here are the measurements.



She wants to build a fence around the whole field.

Estimate how much fencing you think she will need.

125·5 + 89·6 + 125·5 + 89·6

= 251 + 179·2

430·2m

Talk about your estimate with a partner.

Day 4 Maths

Summer Term Week 7
(w/c 8th June)

1. We are working on:

2. Then find the lesson you are on - Order and compare decimals

3. Watch the video on: https://vimeo.com/425603300

4. You will need a pencil and paper to help work out the answers

. Watch the video and practice as you go along

(read through the slides practice as you go along)

6. At the end of the video or slides, answer the questions that are in your pack

Lesson 4
Questions

Order and compare decimals

1 Which number is greater?

Tick your answer.

Explain your answer.

2 Which is the smaller number?

Tick your answer.

Explain your answer.

3 Use place value counters to make each of the numbers.

4.13	4.08	5.1

a) Which is the greatest number? ☐

b) Which is the smallest number? ☐

How do you know?

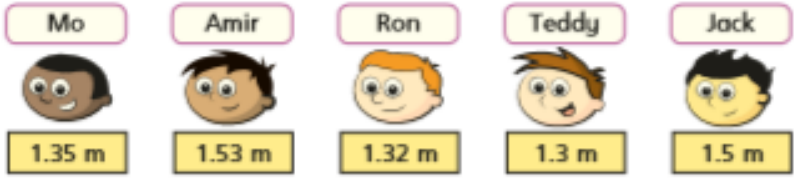
4 Here are some numbers in a place value chart.

Ones	Tenths	Hundredths	Thousandths
3	2	3	4
3	1	6	
3	2	0	8
3	1	4	5

Write the numbers in order, starting with the greatest.

☐ ☐ ☐ ☐

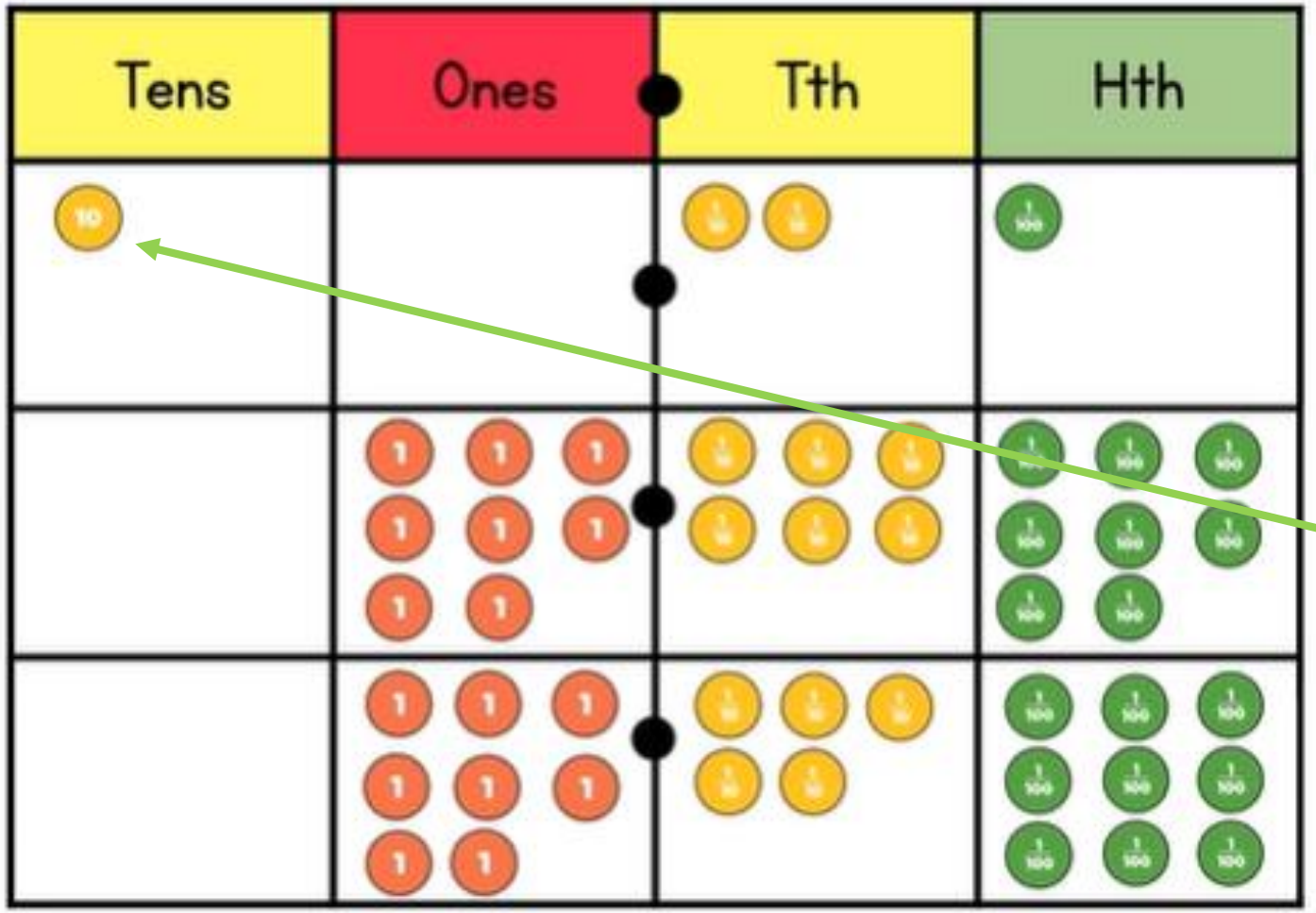
5 Mo, Amir, Ron, Teddy and Jack are measuring their heights with a metre rule.



Write the names and heights of the children in order from shortest to tallest.

Name	Height

USE THIS SHEET TO LEARN FROM



10.21

8.68

8.59

It doesn't matter how many counters there are in each column.

We need to look at WHICH column they are in and which column has MORE value.

This number doesn't have many counters compared to the other two numbers. Look at where the counters are placed.

There is a counter in the TENS column. There is not for the other two numbers. This counter in the tens has a value of TEN. So, it is a larger number than 8

Smaller than 5

greater than 4

Same

$$3.56 > 3.46$$

same

$$6.98 < 7.01$$

6 has fewer ONES than 7.
Therefore, 6.98 < 7.01

Tens	Ones	Tth	Hth
7	6	3	
3	5	0	3
7	6	4	1

The number with the fewest TENS is 35.03.

But the next two numbers left have both 7 in the TENS column AND 6 in the ONES column.

So, we need to go to the NEXT column.

The numbers represented in the TENTH are 3 and 4.

So, the number with the 3 in the TENTH column is the next smallest number

Smallest
35.03
76.3
76.41

Tens	Ones	Tth	Hth
7	6	3	
3	5	0	3
7	6	4	1

5.4 5.5 5.33 5.44 **a**

They ALL start with 5 in the ONES
So, let us go to the TENTHS

5.4 5.5 5.33 5.44 **b**

5.4 5.44 **c**

From this, we can clearly see the largest and smallest number.

5.33 5.5

But, we still have two numbers left that are very similar!

d

5.4 5.44

5.4 has NO hundredths and 5.44 and 4 hundredths so has a larger value

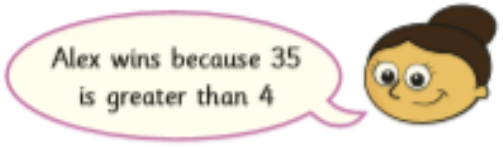
Answer

5.33 5.4 5.44 5.5

Lesson 4
Questions

6 Alex and Dora are competing in the long jump.

Alex jumps 1.35 metres and Dora jumps 1.4 metres.



a) Is Dora correct? _____

Talk about it with a partner.

b) Kim joins in the competition.

What is the shortest distance she can jump to go into the lead?

_____

7 Write the numbers in ascending order.

a) 0.45 0.654 0.546 0.405

☐ ☐ ☐ ☐

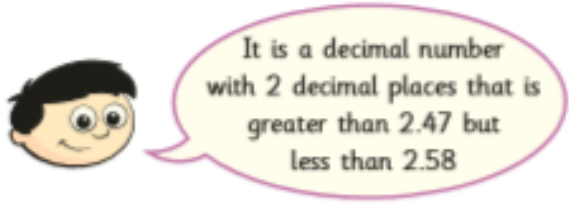
b) 7.2 kg 7.212 kg 7.21 kg

☐ ☐ ☐

c) 25.391 25.309 25.093 25.193

☐ ☐ ☐ ☐

8 Dexter is thinking of a number.



What possible numbers could Dexter be thinking of?

_____

_____

9 Tick the numbers that are equal to 2.5

Circle the numbers that are greater than 2.5

You will need to convert the mixed numbers to decimal numbers first.

2.05	$2\frac{5}{10}$	$2\frac{1}{2}$
$2\frac{5}{100}$	2.53	$2\frac{3}{5}$
2.501	$2\frac{80}{100}$	$2\frac{3}{10}$

Lesson 4
Answers

Order and compare decimals

1 Which number is greater?

Tick your answer.

Explain your answer.

It has more ones.

2 Which is the smaller number?

Tick your answer.

Explain your answer.

It has fewer tenths.

3 Use place value counters to make each of the numbers.

4.13	4.08	5.1

a) Which is the greatest number? 5.1

b) Which is the smallest number? 4.08

How do you know?

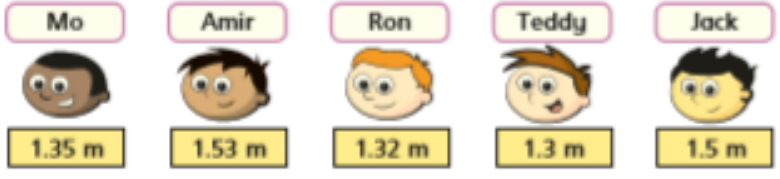
4 Here are some numbers in a place value chart.

Ones	Tenths	Hundredths	Thousandths
3	2	3	4
3	1	6	
3	2	0	8
3	1	4	5

Write the numbers in order, starting with the greatest.

3.234	3.208	3.16	3.145

5 Mo, Amir, Ron, Teddy and Jack are measuring their heights with a metre rule.



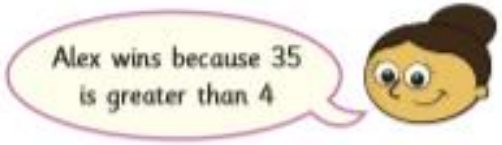
Write the names and heights of the children in order from shortest to tallest.

Name	Height
Teddy	1.3m
Ron	1.32m
Mo	1.35m
Jack	1.5m
Amir	1.52m

Lesson 4
Answers

6 Alex and Dora are competing in the long jump.

Alex jumps 1.35 metres and Dora jumps 1.4 metres.



a) Is Dora correct? no

Talk about it with a partner.

b) Kim joins in the competition.

What is the shortest distance she can jump to go into the lead?

1·41m

7 Write the numbers in ascending order.

a) 0.45 0.654 0.546 0.405

0·405	0·45	0·546	0·654

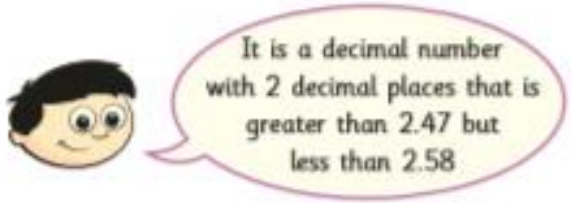
b) 7.2 kg 7.212 kg 7.21 kg

7·2kg	7·21kg	7·212kg

c) 25.391 25.309 25.093 25.193

25·093	25·193	25·309	25·391

8 Dexter is thinking of a number.



What possible numbers could Dexter be thinking of?

2·48, 2·49, 2·50, 2·51, 2·52, 2·53, 2·54, 2·55, 2·56, 2·57

9 Tick the numbers that are equal to 2.5

Circle the numbers that are greater than 2.5

You will need to convert the mixed numbers to decimal numbers first.

2.05	$2\frac{5}{10}$ ✓	$2\frac{1}{2}$ ✓
$2\frac{5}{100}$	2.53	$2\frac{3}{5}$
2.501	$2\frac{80}{100}$	$2\frac{3}{10}$

Day 5

TTROCKS AND SUMDOG

CHECK FOR ANY CHALLENGES!!!