1 x 12 = 12

2 x 12 = 24

3 x 12 = 36

4 x 12 = 48

5 x 12 = 60

6 x 12 = 72

7 x 12 = 84

8 x 12 = 96

9 x 12 = 108

10 x 12 = 120

11 x 12 = 132

12 x 12 = 144

$12 \div 12 = 1$

$24 \div 12 = 2$

$36 \div 12 = 3$

$48 \div 12 = 4$

$60 \div 12 = 5$

$72 \div 12 = 6$

$84 \div 12 = 7$

$96 \div 12 = 8$

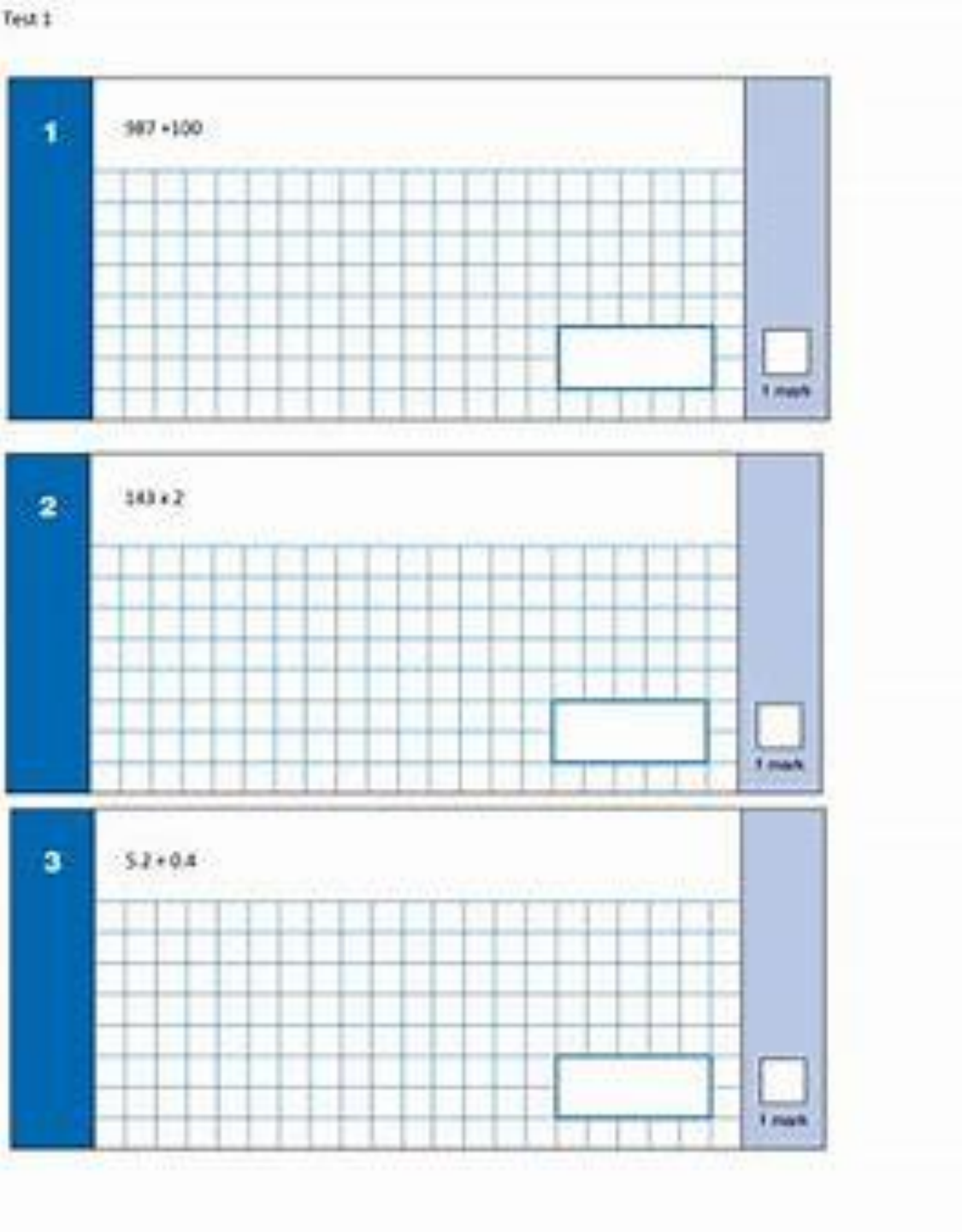
$108 \div 12 = 9$

$120 \div 12 = 10$

$132 \div 12 = 11$

$144 \div 12 = 12$

Arithmetic Test



12.01.2021

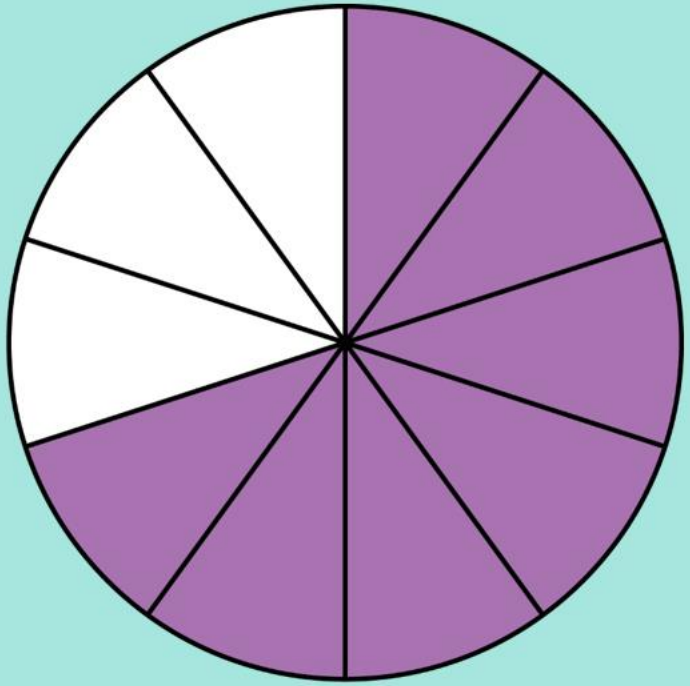
L.O: To recognise decimal as fractions.

Success Criteria;

- Use your knowledge of place value
- Use your knowledge of equivalent fractions
- Simplify fractions

Tenths and Hundredths

What fraction is represented by...



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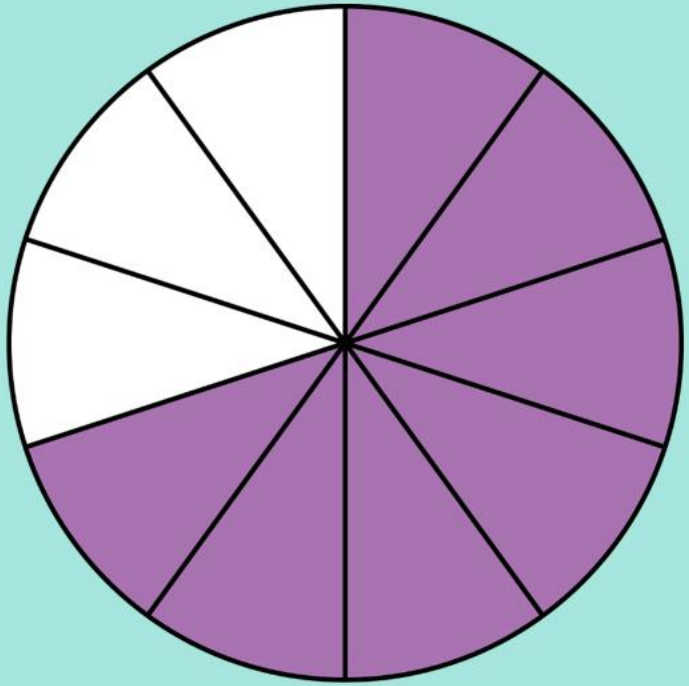
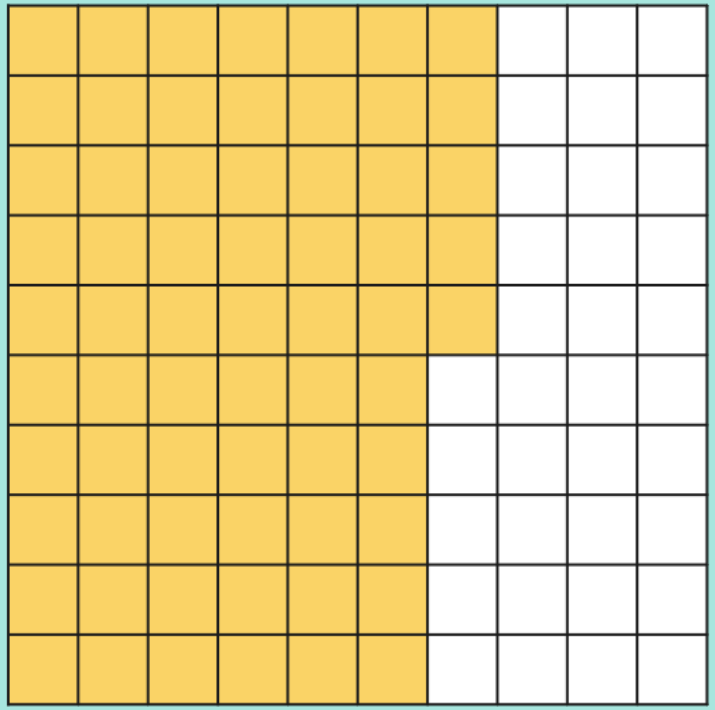


$\frac{7}{10}$ because the whole circle has been divided into 10 equal pieces and 7 of them are coloured in.

Tenths and Hundredths

What fraction is represented by...



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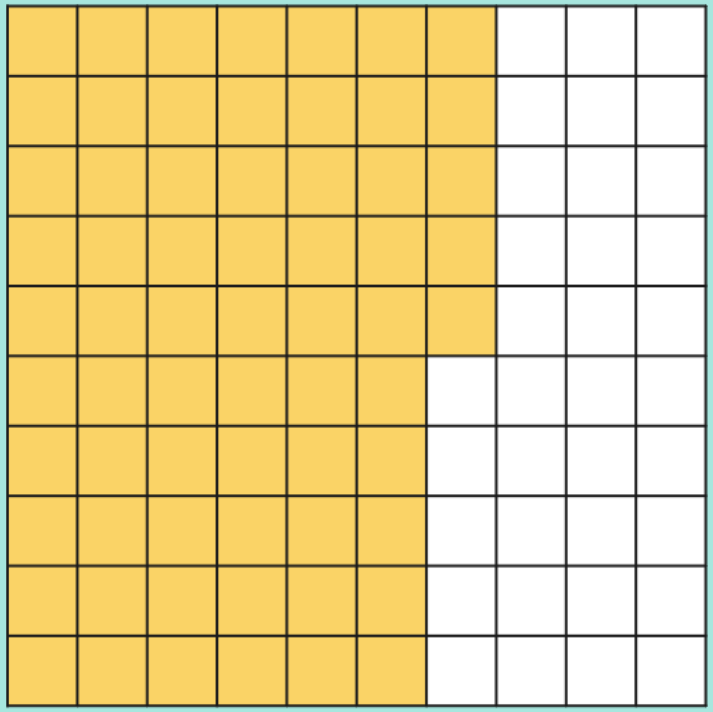
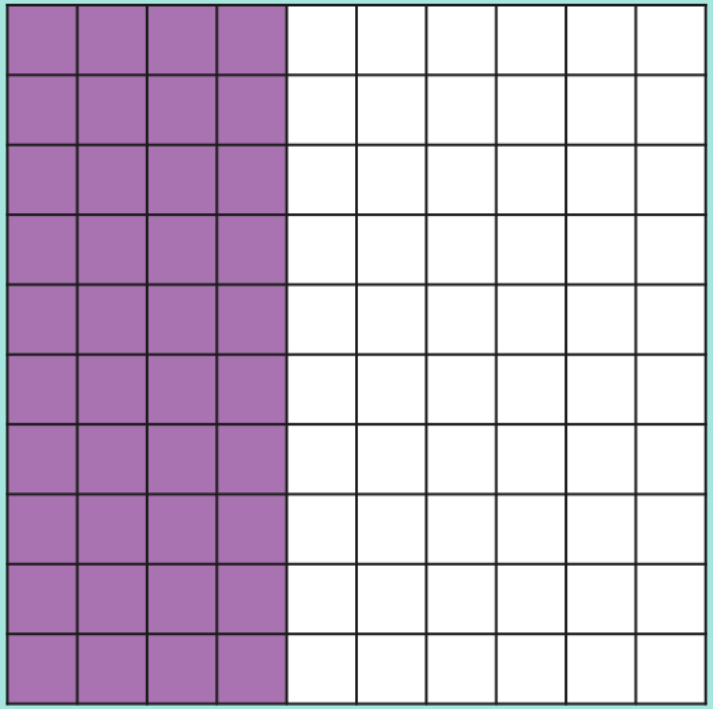


$\frac{65}{100}$ because the whole square has been divided in to 100 equal pieces and 65 of them are coloured in.

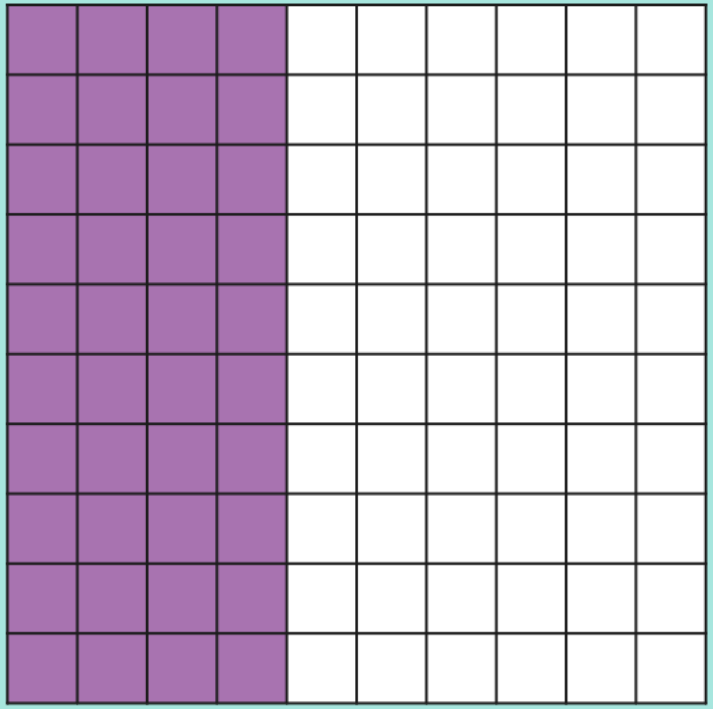
Tenths and Hundredths

What fraction is represented by...



Tenths and Hundredths

What fraction is represented by...



$\frac{40}{100}$ because the whole square has been divided in to 100 equal pieces and 40 of them are coloured in.

Or

$\frac{4}{10}$ because the whole group of 100 squares could be divided into equal groups of 10 squares each and 4 of those groups are coloured in.

Decimals as fractions

$$.0.86 = \frac{43}{50}$$

Decimals as fractions

Decimals and fractions are related. Just as fractions have equivalent fractions, decimals also have equivalent fractions. It's important to know and understand how to write decimals as fractions, because this helps us to understand the place value of the numbers.

Example 1: Converting a number with one decimal point

Let's take a look at how to convert **0.7** into a fraction.

Step 1: Put the decimal into the place value chart.

H	T	H	Tths	Hths
		0	7	

Step 2: From the place value chart, you can see which column the number ends in - the **tenths** column (Tths).

The denominator becomes 10. The numerator is the number after the decimal point. Therefore:

0.7 = $\frac{7}{10}$

Try these!

0.1 =

0.2=

0.3=

0.4=

0.5=

0.6=

0.7=

0.8=

0.9=

Decimals as fractions

Decimals and fractions are related. Just as fractions have equivalent fractions, decimals also have equivalent fractions. It's important to know and understand how to write decimals as fractions, because this helps us to understand the place value of the numbers.

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0.7 = $\frac{7}{10}$

Answers!

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

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

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

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

0.5= $\frac{5}{10}$

0.6= $\frac{6}{10}$

0.8= $\frac{8}{10}$

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

Example 2: Converting a number with two decimal places

How do you convert **0.91**?

You can use the same method.

H	T	H •	Tths	Hths
		0 •	9	1

0.91 = < $\frac{91}{100}$

Try these!

0.16 =

0.25=

0.33=

0.45=

0.56=

0.67=

0.75=

Example 2: Converting a number with two decimal places

How do you convert **0.91**?

You can use the same method.

H	T	H •	Tths	Hths
		0 •	9	1

0.91 = < $\frac{91}{100}$

Answers!

0.16 = $\frac{16}{100}$

0.25= $\frac{25}{100}$

0.33= $\frac{33}{100}$

0.45= $\frac{45}{100}$

0.56= $\frac{58}{100}$

0.67= $\frac{67}{100}$

0.75= $\frac{75}{100}$

Simply the answers that have a common factor. (The numerator and denominator can both be divided by the same number.)

Simplified fractions

$$0.16 = \frac{16}{100} = \frac{4}{25}$$

$$0.25 = \frac{25}{100} = \frac{1}{4}$$

$$0.45 = \frac{45}{100} = \frac{9}{20}$$

$$0.56 = \frac{58}{100} = \frac{29}{50}$$

$$0.75 = \frac{75}{100} = \frac{3}{4}$$

Example 3: Converting decimals which are more than 1

How do you convert **5.69** into a fraction?

Step 1: Put the number into the place value chart.

H	T	H	Tths	Hths
		5	6	9

Step 2: Convert the numbers after the decimal point into a fraction.

Keep the 5 in the ones column as a **whole number**. This turns the fractions into a **mixed number**.

5.69 = $5\frac{69}{100}$

Try these!

4.16 =

1.25=

2.93=

0.32=

Example 3: Converting decimals which are more than 1

How do you convert **5.69** into a fraction?

Step 1: Put the number into the place value chart.

H	T	H	Tths	Hths
		5	6	9

Step 2: Convert the numbers after the decimal point into a fraction.

Keep the 5 in the ones column as a **whole number**. This turns the fractions into a **mixed number**.

5.69 = $5\frac{69}{100}$

Answers!

4.16 = $4\frac{16}{100}$

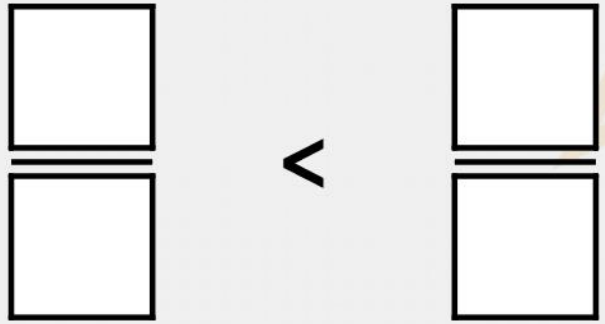
1.25= $1\frac{25}{100}$

2.93= $2\frac{93}{100}$

0.32= $6\frac{32}{100}$

Problem Solving 1

Use the digit cards to make the inequality statements true. You can use the cards more than once.



1	5	8	0	4	25

Problem Solving 1

Use the digit cards to make the inequality statements true. You can use the cards more than once.

$$\boxed{0}.\boxed{25} < \boxed{0}.\boxed{8}$$

$$\frac{\boxed{1}}{\boxed{4}} < \frac{\boxed{4}}{\boxed{5}}$$

1	5	8	0	4	25

Reasoning 1

Mei says,

0.84 is less than $\frac{8}{10}$.

Is she correct? Prove it.

Reasoning 1

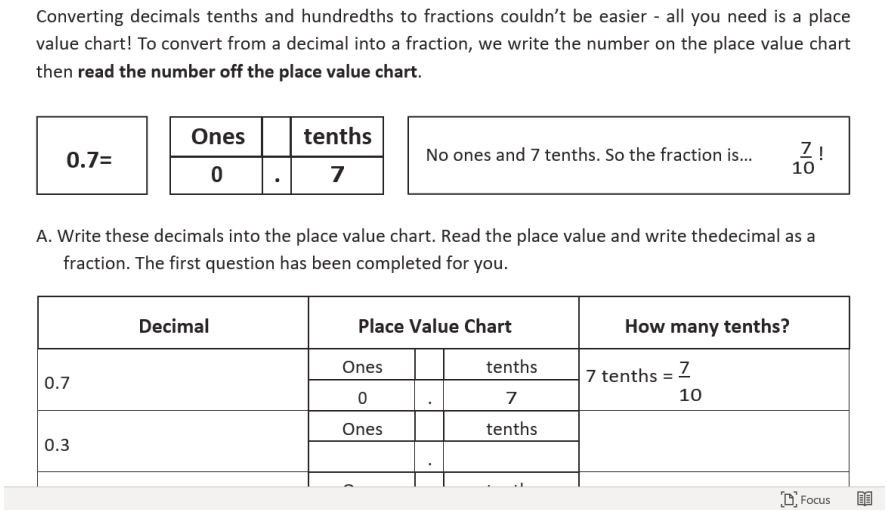
Mei says,

0.84 is less than $\frac{8}{10}$.

Is she correct? Prove it.

Mei is incorrect because 0.84 has 8 tenths and 4 hundredths, but $\frac{8}{10}$ has 8 tenths and 0 hundredths. This makes 0.84 greater than $\frac{8}{10}$.

Main Activity



Converting decimals tenths and hundredths to fractions couldn't be easier - all you need is a place value chart! To convert from a decimal into a fraction, we write the number on the place value chart then **read the number off the place value chart**.

0.7=	Ones		tenths
	0	.	7

No ones and 7 tenths. So the fraction is... $\frac{7}{10}$!

A. Write these decimals into the place value chart. Read the place value and write thedecimal as a fraction. The first question has been completed for you.

Decimal	Place Value Chart			How many tenths?
0.7	Ones		tenths	7 tenths = $\frac{7}{10}$
	0	.	7	
0.3	Ones		tenths	
		.		

Focus

Complete the worksheet- converting tenths and hundredths
Complete the RPS worksheet you are normally given in class- red, blue or yellow

Plenary

True or False?

0.3 is bigger than $\frac{1}{4}$

Explain your reasoning.