

$$1 \times 12 = 12$$

$$2 \times 12 = 24$$

$$3 \times 12 = 36$$

$$4 \times 12 = 48$$

$$5 \times 12 = 60$$

$$6 \times 12 = 72$$

$$7 \times 12 = 84$$

$$8 \times 12 = 96$$

$$9 \times 12 = 108$$

$$10 \times 12 = 120$$

$$11 \times 12 = 132$$

$$12 \times 12 = 144$$

$$12 \div 12 = 1$$

$$24 \div 12 = 2$$

$$36 \div 12 = 3$$

$$48 \div 12 = 4$$

$$60 \div 12 = 5$$

$$72 \div 12 = 6$$

$$84 \div 12 = 7$$

$$96 \div 12 = 8$$

$$108 \div 12 = 9$$

$$120 \div 12 = 10$$

$$132 \div 12 = 11$$

$$144 \div 12 = 12$$

# Arithmetic Test

Test 1

<b>1</b>	$987 \div 100$	<input type="text"/>	<input type="checkbox"/> 1 mark
<b>2</b>	$343 \times 2$	<input type="text"/>	<input type="checkbox"/> 1 mark
<b>3</b>	$5.2 + 0.4$	<input type="text"/>	<input type="checkbox"/> 1 mark

13.01.2021

L.O: To convert fractions into decimals.

### Success Criteria;

- Use your knowledge of place value
- Use your knowledge of equivalent fractions
- Use your knowledge of decimal equivalents

## Introduction

Order these decimals in ascending order.

0.6

0.75

0.33

0.09

0.65

## Introduction

Order these decimals in ascending order.

0.09

0.33

0.6

0.65

0.75

T	O	tth	hth	thth
		● ●	●● ●●	●● ●

1) What number is represented in the place value chart? Write it in words and numerals.

2) Write each decimal as a fraction.

$$0.7 =$$

$$0.73 =$$

$$0.42 =$$

$$0.88 =$$

3) What is the value of the digit 6? 41.986

T	O	tth	hth	thth
		● ● 0.1 0.1	● ● 0.01 0.01 0.01 0.01	● ● 0.001 0.001 0.001

- 1) What number is represented in the place value chart? Write it in words and numerals.

0.243 Two hundred and forty three thousandths

- 2) Write each decimal as a fraction.

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

$$0.73 = \frac{73}{100}$$

$$0.42 = \frac{42}{100} = \frac{21}{50}$$

$$0.88 = \frac{88}{100} = \frac{44}{50} = \frac{22}{25}$$

- 3) What is the value of the digit 6? 41.986

6 thousandths

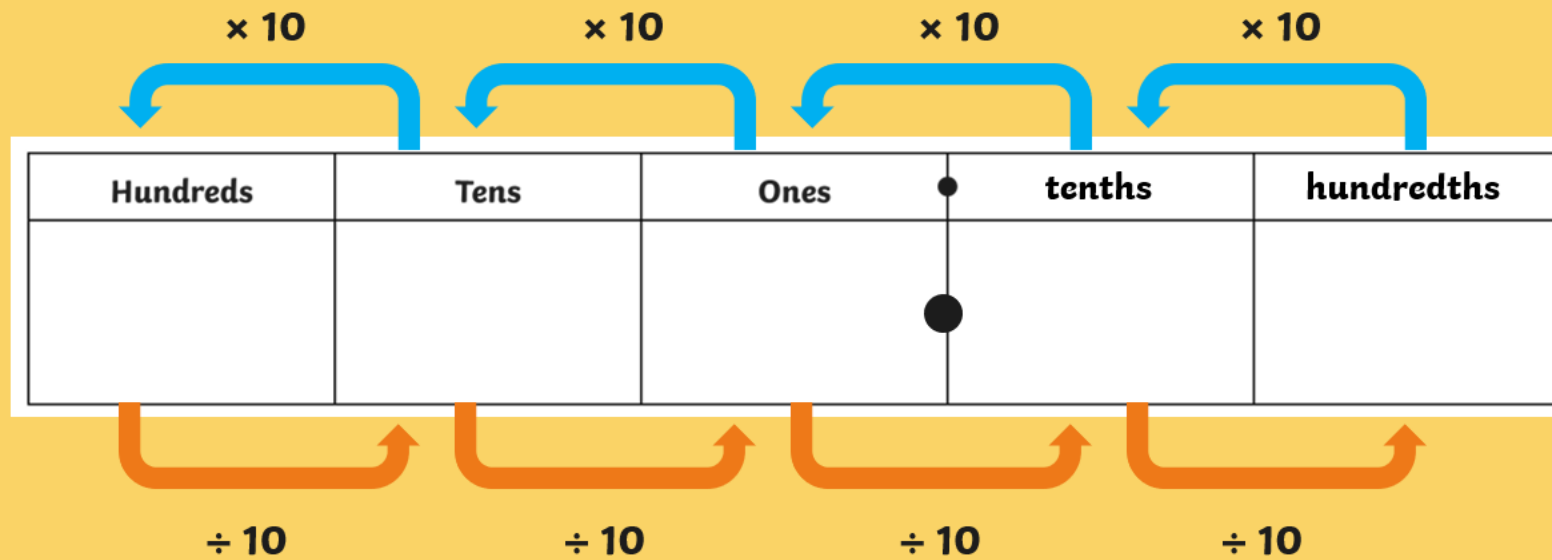


# Fractions as decimals

CONVERT FRACTIONS TO DECIMALS

$$\frac{2}{5} = 0.4$$

# Place Value



# Fractions to Decimals

How would you write  $\frac{3}{10}$  as a decimal number?

Hundreds	Tens	Ones	•	tenths	hundredths
			•		

# Fractions to Decimals

How would you write  $\frac{3}{10}$  as a decimal number?

Hundreds	Tens	Ones	tenths	hundredths
		0	3	

Place holder

3 tenths

# Fractions to Decimals

How would you write  $\frac{10}{10}$  as a decimal number?

Hundreds	Tens	Ones	•	tenths	hundredths
			•		

# Fractions to Decimals

How would you write  $\frac{10}{10}$  as a decimal number?

Hundreds	Tens	Ones	•	tenths	hundredths
		1	•		

# Fractions to Decimals

How would you write  $\frac{4}{100}$  as a decimal number?

Hundreds	Tens	Ones	•	tenths	hundredths
			•		

# Fractions to Decimals

How would you write  $\frac{4}{100}$  as a decimal number?

Hundreds	Tens	Ones	•	tenths	hundredths
		0	•	0	4

Place holders

4 hundredths



# Fractions to Decimals

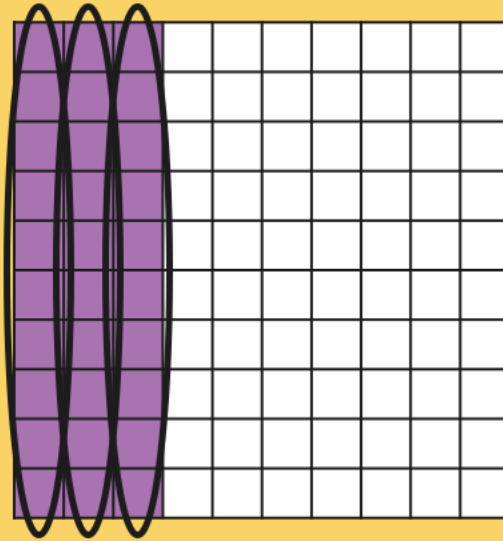
How would you write  $\frac{30}{100}$  as a decimal number?

Hundreds	Tens	Ones	•	tenths	hundredths
			•		

# Fractions to Decimals

How would you write  $\frac{30}{100}$  as a decimal number?

Hundreds	Tens	Ones	•	tenths	hundredths
		0	•	3	



## Varied Fluency 2

**True or false?**

**0.8 is equivalent to  $\frac{4}{5}$ .**

## Varied Fluency 2

**True or false?**

**0.8 is equivalent to  $\frac{4}{5}$ .**

**True**

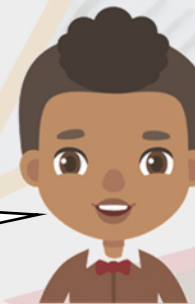
## Reasoning 1

Steph and Ben are comparing fractions.



Steph

I think that 0.35 is greater.



Ben

I think that  $\frac{2}{5}$  is greater.

Who is correct?  
Explain how you know.



## Reasoning 1

Steph and Ben are comparing fractions.



Steph

I think that 0.35 is greater.



Ben

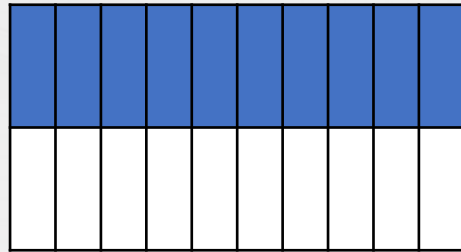
I think that  $\frac{2}{5}$  is greater.

Who is correct?  
Explain how you know.

**Ben is correct,  $\frac{2}{5}$  is 0.4 which is greater than 0.35.**

## Problem Solving 1

Convert the fractions into decimals and write them in ascending order.



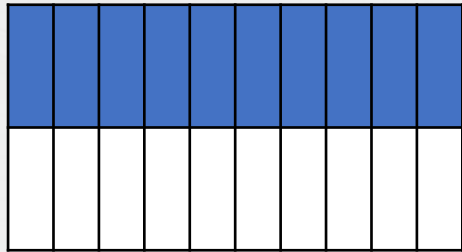
$$\frac{3}{5}$$

$$\frac{4}{10}$$



### Problem Solving 1

Convert the fractions into decimals and write them in ascending order.



0.5

$$\frac{3}{5}$$

0.6

$$\frac{4}{10}$$

0.4



0.8

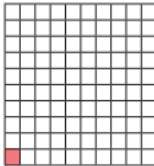
In ascending order: 0.4, 0.5, 0.6, 0.8



# Main Activity

**Fractions to decimals (1)**

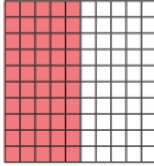
1 Complete the sentences.

a) 

Each square represents  $\frac{\square}{100}$

$\frac{\square}{100}$  of the whole square is shaded.


This is equivalent to  $\square$  as a decimal.

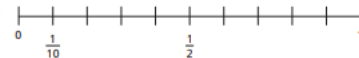
b) 

$\frac{\square}{100}$  of the whole square is shaded.

This can be simplified to  $\frac{\square}{\square}$

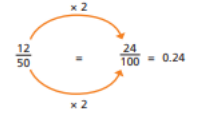
This is equivalent to  $\square$  as a decimal.

2 a) 

b) 

What is the same and what is different about the number lines?

3 To convert a fraction to a decimal, you can use equivalent fractions to make the denominator 100



Use this method to find the equivalent decimals for the fractions.

a)  $\frac{28}{50} = \frac{\square}{100} = \square$

b)  $\frac{6}{20} = \frac{\square}{100} = \square$

c)  $\frac{9}{25} = \frac{\square}{100} = \square$

d)  $\frac{24}{200} = \frac{\square}{100} = \square$

© White Rose Maths 2019

Complete the worksheet- fractions to decimals  
Complete the RPS worksheet you are normally given in class-  
red, blue or yellow

# Plenary

True or False?

Decimals as fractions

$$\frac{47}{100} > 0.375$$

# Plenary

True or False?

Decimals as fractions

True

$$\frac{47}{100} = 0.47$$

$$0.47 > 0.375$$