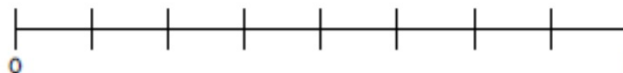


7.2.22

Can you divide a decimal using known facts?

- 5 Write the fractions in order from smallest to largest.  
You may use the number line to help you.

$$\frac{3}{4} \quad \frac{5}{8} \quad \frac{3}{8} \quad \frac{1}{16}$$



What is a decimal?

How does it connect to a fraction?

How would you work out

$$4.8 \div 6 =$$

How would you work out

$$4.8 \div 6 =$$



Four small blocks balance a 0.8kg box. What is the mass of each block?

$$4 \times \underline{\quad} = 0.8 \text{ kg}$$



0.8			
?	?	?	?

How many blocks would balance an 8kg crate?

A bottle contains 1.2 litres of juice. It is shared equally between 3 glasses. How many litres of juice were in each glass? Discuss and work through together.



## Plenary

A tower is built with 4 blocks of equal size. The height in total is 4.4cm. What is the height of one block?



## 8.2.22

Can you use short division to divide decimals?

6 Calculate

$$\frac{2}{3} + \frac{1}{9} =$$

$$\frac{5}{6} - \frac{3}{4} =$$

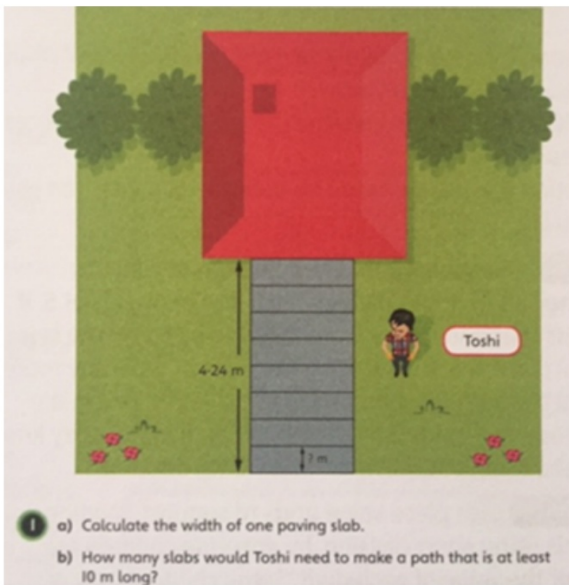
$$2\frac{3}{5} + 1\frac{1}{2} =$$

$$0.8 \div 5 =$$

$$85.8 \div 5 =$$

$$8.05 \div 5 =$$

$$508.5 \div 5 =$$



What number sentence do you need to calculate?

- a) Calculate the width of one paving slab.
- b) How many slabs would Toshi need to make a path that is at least 10 m long?

A gardener cuts a 3.5m length of wood into 4 equal planks. What is the length of each plank?

## Task

$$4.24 \div 4 = \quad 9.2 \div 8 = \quad 8.64 \div 6 =$$

Solve these divisions

$$10.5 \div 3 = \quad 10.5 \div 6 = \quad 10.5 \div 30 =$$

How are the answers to the divisions related to each other?

## Plenary

Which calculation is equivalent to  $32 \div 1000$

$$0.32 \div 10$$

$$0.032 \times 10$$

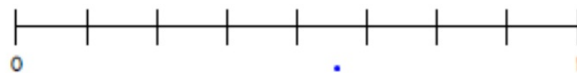
$$320 \div 100$$

$$3200 \div 1000$$

9.2.22

What is the relationship between decimals and fractions?

- 7 Draw arrows from each fraction to its position on the number line.



$$\frac{36}{48}$$

$$\frac{33}{66}$$

$$\frac{29}{29}$$

How do you write

1 tenth =

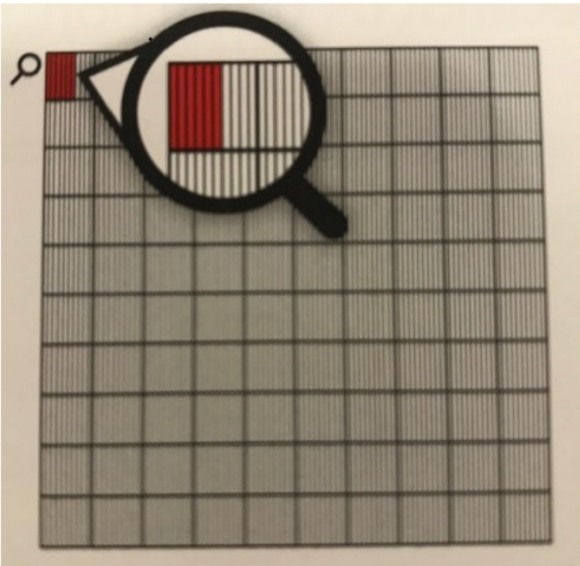
1 hundredth =

1 thousandth =

How would you write these as a fraction?







Write as a fraction

$0.1 =$

$0.6 =$

$0.25 =$

$0.85 =$

Can we simplify?

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

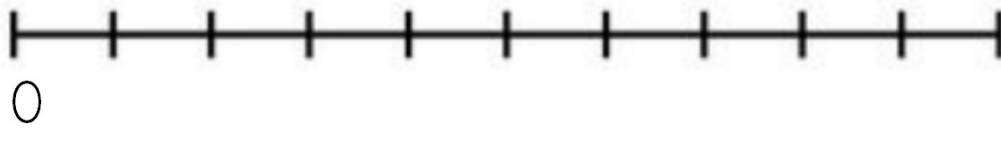
$$0.6 = \frac{6}{10}$$

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

$$0.85 = \frac{85}{100}$$

Where would they go on a number line?

0.1, 0.25, 0.6, 0.85



## Task

Write each decimal as a fraction

$0.007 =$

$0.997 =$

$0.131 =$

$0.51 =$

$0.04 =$

$0.05 =$

$0.004 =$

$0.005 =$

10.2.22

How can you calculate the equivalent decimal?

Write each decimal as a fraction.

$0.7 =$

$0.73 =$

$0.42 =$

$0.88 =$

Is  $13/50 = 0.13$  ?

How can  $\frac{1}{5}$  be written as a decimal?

How can  $\frac{3}{5}$  be written as a decimal?

How can  $\frac{3}{50}$  be written as a decimal?

How can  $5/25$  be written as a decimal?

You try

$$2/25 =$$

$$6/5 =$$

$$1/2 =$$

What is the equivalent decimal for  $53/250$ ?

What is the equivalent decimal for  $118/2000$ ?

What is the equivalent decimal for  $81/500$ ?

$$\text{If } 1/10 = 0.1$$

$$1/20 = ?$$

How would you write  $45/500$  as a decimal?

Task - Write each fraction as a decimal.

$$3/100 =$$

$$13/100 =$$

$$52/100 =$$

$$143/1000 =$$

$$2/5 =$$

$$14/50 =$$

$$231/500 =$$

$$3/1000 =$$

$$345/1000 =$$

$$2/5 =$$

$$8/20 =$$

$$17/20 =$$

$$1/50 =$$

$$3/200 =$$

$$99/250 =$$

11.2.22

How can you calculate the equivalent decimal?

1) Find the equivalent decimals for these fractions.

$$\frac{35}{50}$$

$$\frac{62}{200}$$

$$\frac{123}{250}$$

$$\frac{467}{2000}$$

2) Find the equivalent fractions for these decimals.

0.41

0.057

0.36

0.75

How can you find the decimal equivalent of:

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

$$10$$

$$\frac{43}{100} =$$

$$100$$

$$\frac{1}{5} =$$

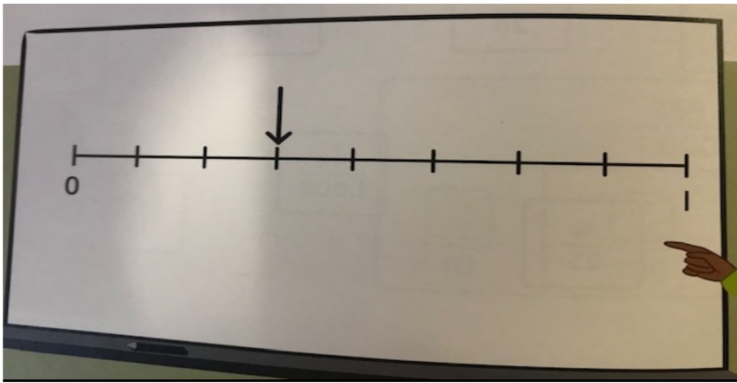
$$5$$

$$\frac{1}{2} =$$

$$2$$

How do you write  $\frac{1}{5}$  as a decimal?

How do you write  $\frac{3}{4}$  as a decimal?



$$\frac{5}{8} =$$

7  
8

How would you change  $1/3$  to a decimal?

$$3 \overline{) 1}$$

What do you notice?

Task

$$6/9 =$$

$$42/100 =$$

$$3/25 =$$

$$3/10 =$$

$$3/50 =$$

$$2/50 =$$

$$5/12 =$$

$$3/5 =$$

$$300/450 =$$

$$4/25 =$$

$$6/90 =$$

