Maths Spr 2 Task 1

You can find the videos for each day on White Rose Home Learning. We will be using Spring Week 2

https://whiterosemaths.com/homelearning/year-6/

Learning Objective- Multiply a whole number by a decimal?

-Watch the video-

Complete the worksheet attached:

1 Use place value counters to solve the calculations.

a) 3.2 × 3 = ☐

Ones	Tenths
1 1 1	0.1 0.1
1 1 1	0.1 0.1
1 1 1	0.1 0.1

b) 4.6 × 2 = ☐

Ones	Tenths
1 1 1 1	0.1 0.1 0.1 0.1 0.1 0.1
1 1 1 1	0.1 0.1 0.1 0.1 0.1 0.1

2 Solve the multiplication. Draw your answer.

12.2 × 3 = ☐

Tens	Ones	Tenths

4 Work out the multiplications.

a) $5.2 \times 4 =$ ☐

b) $14.3 \times 3 =$ ☐

c) $6 \times 9.1 =$ ☐

d) ☐ $= 2.34 \times 3$

e) $11.505 \times 4 =$ ☐

f) $9.602 \times 6 =$ ☐

7 Amir is solving 3.4×4

To solve this, I did 34×4, which was 136
Then I multiplied my answer by 10 to get an answer of 1,360

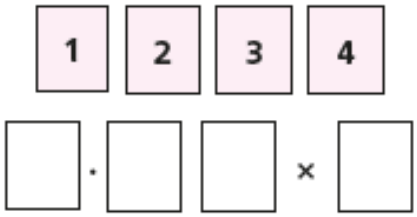
Do you agree with Amir? _____

Explain why.

_____

_____

8 Use the digits 1, 2, 3 and 4 once each to create a calculation.



a) How many different products can you make?

b) What is the greatest possible product?

c) What is the smallest possible product?

d) What is the product closest to 12?

Maths Spr 2 Task 2

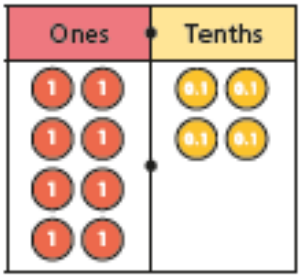
Learning Objective- Divide a decimal by a whole number?

-Watch the video-

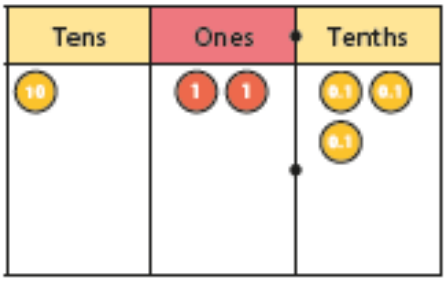
Complete the worksheet attached:

1 Use place value counters to work out the divisions.

a) 8.4 ÷ 4 = ☐

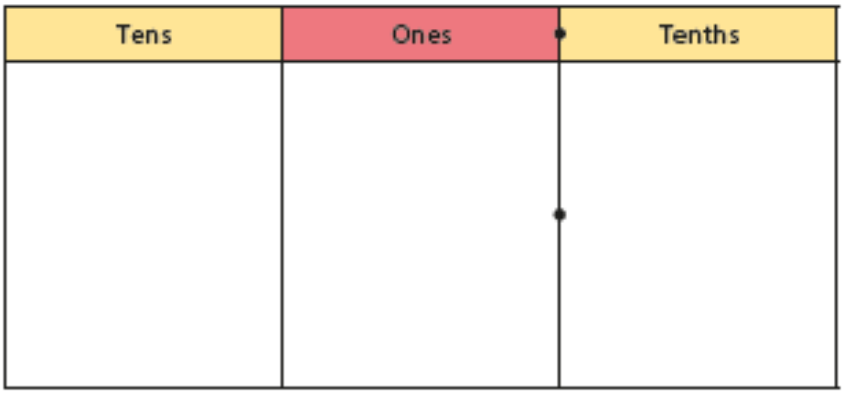


b) 12.3 ÷ 3 = ☐

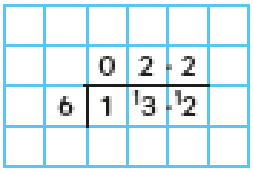


2 Work out the division. Draw your answer.

16.4 ÷ 4 = ☐

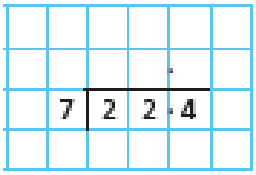


3 Brett uses short division to work out 13.2 ÷ 6

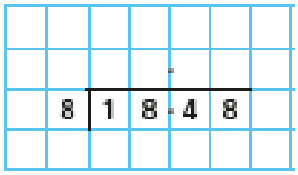


Use short division to work out the calculations.

a)



b)



4 Work out the divisions.

a) 25.6 ÷ 8 = ☐

d) ☐ = 19.45 ÷ 5

b) 14.8 ÷ 4 = ☐

e) 202.35 ÷ 3 = ☐

c) 18.48 ÷ 6 = ☐

f) 105.12 ÷ 9 = ☐

7 Fill in the missing numbers.

$3.6 \div 4 = 36 \div \square$

$3.6 \div 4 = \square \div 8$

8 Complete the calculation.

$8.4 \div \square = 4.2 \div \square$

How many different solutions can you find?

Maths Spr 2 Task 3

Learning Objective-To solve problems with decimals

-Watch the video-

Complete the worksheet attached:

1. There are 1,360 children in a school.
   A quarter of the children walk to school.
   How many children walk to school?

2. Huan has saved his pocket money for 5 weeks.
   He gets the same pocket money every week.
   He has saved £16.65
   How much pocket money does Huan get each week?

3. Tom is running a 6-kilometre race.
   He has run one-third of the race so far.
   How many more kilometres does Tom have left to run?

4 Dora, Ron and Teddy are making paper chains.

Dora

My paper chain is 1.1 m long.

Dora's paper chain is twice as long as mine.

Ron

Teddy

My paper chain is three times longer than Ron's.

a) How long is Ron's paper chain?

b) How long is Teddy's paper chain?

5 A water bottle holds 2 litres.

A leak in the bottle means 25 ml drips out each day.

How many days will it take until the bottle is empty?

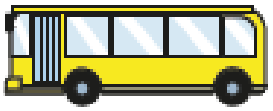
days

More challenging:

6 a) A school bus can hold 30 people.

There are 726 children going on a school trip.

How many buses are needed?



b) A cake needs 4 eggs.

How many cakes can be made from 345 eggs?

7 Shop A sells 5 tins of paint for £23.40

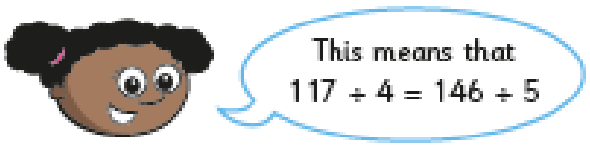
Shop B sells 3 tins of the same paint for £14.01

Which shop should Aisha buy her paint from? _____

Explain your reasoning.

8 146 ÷ 5 = 29 remainder 1

117 ÷ 4 = 29 remainder 1



Do you agree with Whitney? _____

Explain your thinking.

_____

_____

_____

9 I'm thinking of a 3-digit number.

When I divide it by 5, I am left with a remainder of 3

When I divide it by 10, I am left with a remainder of 8

It rounds to 200 to the nearest 100

It has one hundred.

What could my number be?

Maths Spr 2 Task 4

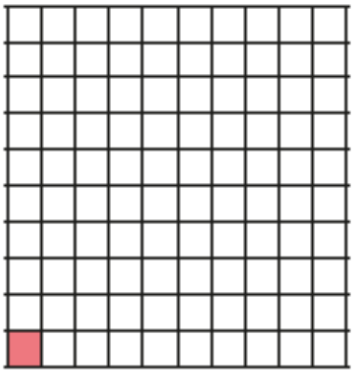
Learning Objective- Can I Convert fractions to decimals?

-Watch the video-

Complete the worksheet attached:

1 Complete the sentences.

a)

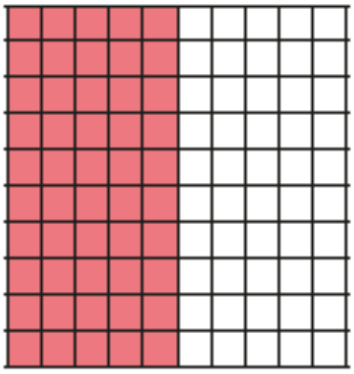


Each square represents $\frac{\square}{100}$

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

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

b)

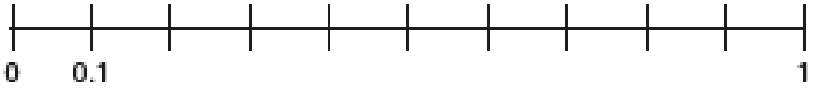


$\frac{\square}{100}$ of the whole square is shaded.

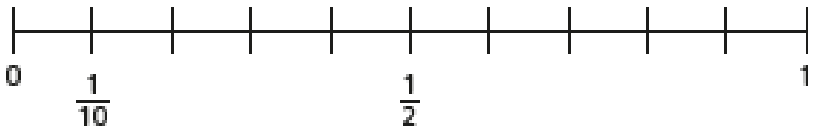
This can be simplified to $\frac{\square}{\square}$

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

2 a)

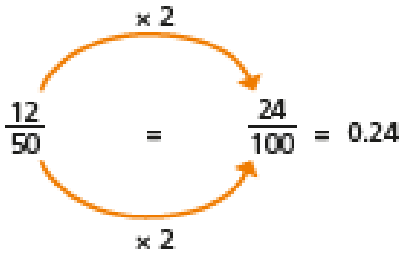


b)



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

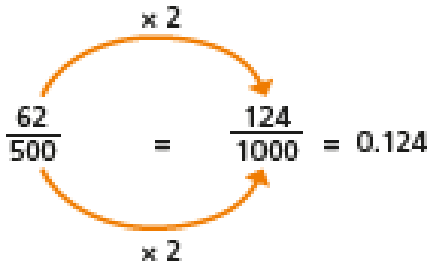
b) $\frac{6}{20} = \frac{\square}{100} = \square$

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

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

More challenging:

4 Some fractions can be converted to have a denominator of 1,000 to find their decimal equivalent.



a) $\frac{27}{500} = \frac{\square}{1000} = \square$

b) $\frac{62}{250} = \frac{\square}{1000} = \square$

c) $\frac{51}{200} = \frac{\square}{1000} = \square$

d) $\frac{128}{2{,}000} = \frac{\square}{1000} = \square$

5 Convert the fractions to their decimal equivalents.

a) $\frac{1}{5} = \square$

b) $\frac{1}{20} = \square$

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

$\frac{2}{20} = \square$

$\frac{1}{20} = \square$

$\frac{3}{20} = \square$

$\frac{1}{40} = \square$

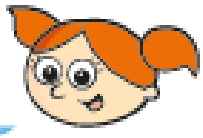
$\frac{6}{20} = \square$

6 Tommy, Alex and Eva are working out the decimal equivalent of $\frac{60}{200}$

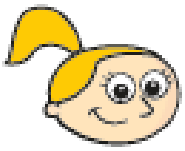
Tommy

You need to convert it to have a denominator of 100 to find the decimal equivalent.

I disagree. You need to convert it to have a denominator of 1,000



Alex



Eva

Both of you are right!

Who do you agree with? _____

Explain your thinking.

_____

_____

_____

7 0.5 is equivalent to $\frac{1}{2}$, $\frac{5}{10}$, $\frac{50}{100}$

Are these the only fractions that are equivalent to 0.5?

How many fractions can you find?

Maths Spr 2 Task 5

Learning Objective- Can I convert a fraction to a decimal ?

-Watch the video-

Complete the worksheet attached:

1 Fractions can be expressed as divisions.

For example, $\frac{1}{2} = 1 \div 2$

Write the fractions as divisions.

a) $\frac{1}{3} = \square \div \square$

b) $\frac{2}{3} = \square \div \square$

c) $\frac{4}{7} = \square \div \square$

d) $\frac{\square}{\square} = 3 \div 5$

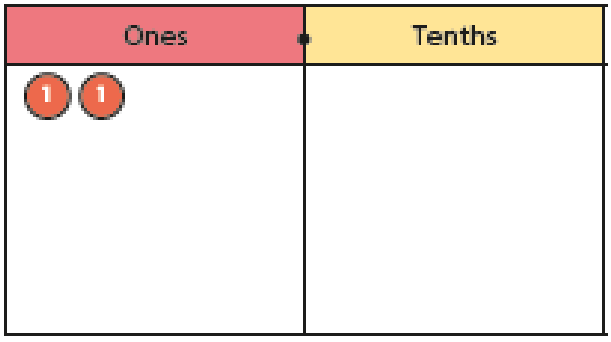
e) $\frac{\square}{7} = 3 \div \square$

f) $\frac{1}{10} = \square \div \square$

2 Use place value counters to find the decimal equivalent of $\frac{2}{5}$

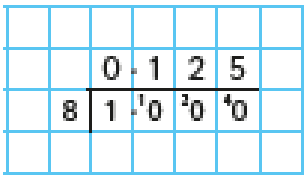
You can draw on the place value chart to help you with exchanging.

$\frac{2}{5} = 2 \div 5 = \square$



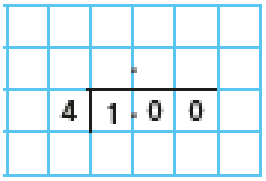
3 Fractions can be converted to decimals by using the short division method.

For example, $\frac{1}{8} = 1 \div 8$

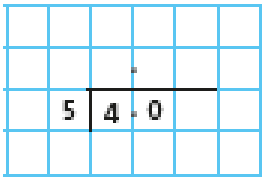


$\frac{1}{8} = 0.125$

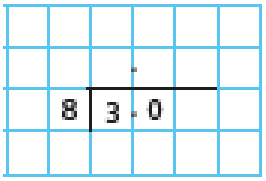
Use the short division method to find the decimal equivalent of the fractions.

a) 

$\frac{1}{4} =$ ☐

b) 

$\frac{4}{5} =$ ☐

c) 

$\frac{3}{8} =$ ☐

More challenging:

4 Find the decimal equivalents for these fractions.

a) $\frac{7}{8}$ = ☐

c) $\frac{1}{16}$ = ☐

b) $\frac{7}{5}$ = ☐

d) $\frac{9}{16}$ = ☐

5

To find $\frac{19}{20}$ as a decimal, I found $\frac{1}{20}$ as a decimal, then took it away from 1

Here is Dora's working out.

			0 .	0	5	
	2	0	1	$^{1}0$	$^{10}0$	

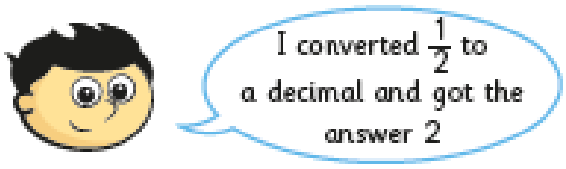
$1 - 0.05 = 0.95$

$\frac{19}{20} = 0.95$

Use Dora's method to find the decimal equivalent for $\frac{49}{50}$

☐

6



Jack is incorrect.

Explain the mistake that Jack has made.

7 Filip is thinking of a fraction.

When he converts it to a decimal, it is smaller than 0.5 but greater than 0.4

What fraction could Filip be thinking of?

Are there any other possible answers? Talk to a partner.

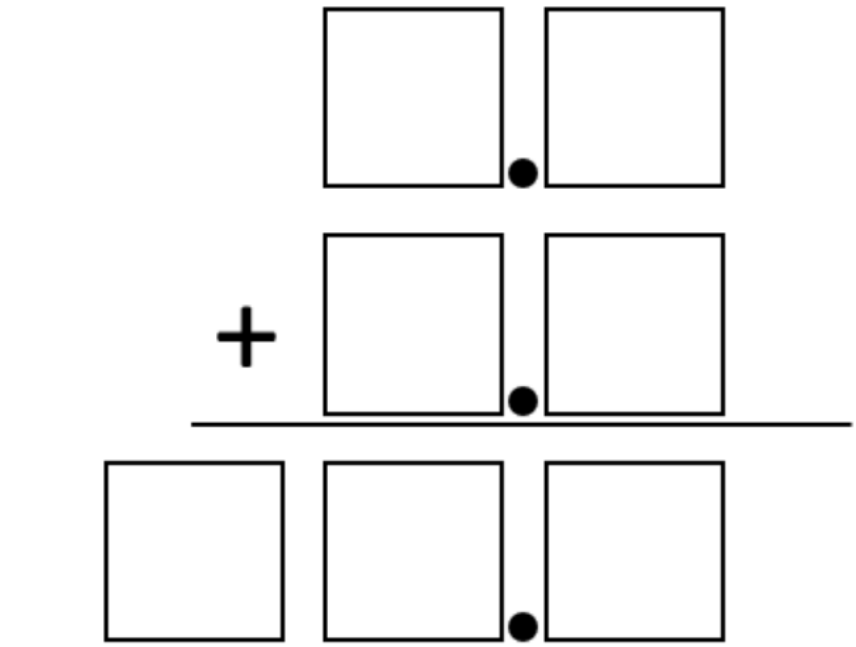
8 Use the short division method to find the decimal equivalent of $\frac{1}{3}$

Maths Spr 2 Challenge 1

Learning Objective- Can I show a logical approach to problem solving?

Use digits 0-9 without repeats to complete the equation below-

Directions: Use the digits, 0 through 9, without repeats, to complete the equation below:



Answers

Here is one possible solution

$$\begin{array}{r} 2.4 \\ +\ 8.5 \\ \hline 10.9 \end{array}$$

How many solutions can you find?

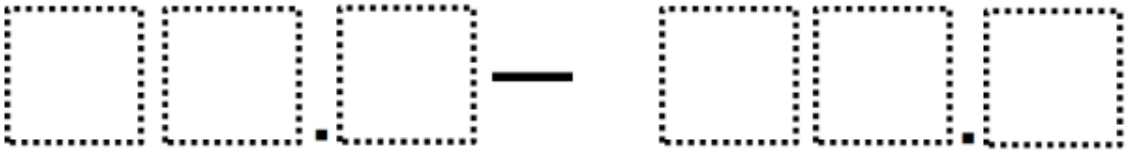
Maths Spr 2 Challenge 2

Learning Objective- Can I show a logical approach to problem solving?

Use digits 0-9 without repeats to complete the equation below-

SUBTRACTING MULTI-DECIMALS

Directions: Use the digits 1 to 9, at most one time each, to fill in the boxes so that the difference is as close to 50 as possible. NOTE: The digits used in the difference can be repeated.



Remember you are looking to find a difference closest to 50

How many solutions can you find?