THIRD SPACE LEARNING

HELLO!

Today we are going to revise multiplying and dividing fractions by whole numbers

THIRD SPACE LEARNING

Arithmetic Warm Up

1. $\frac{2}{9}$ **of** 36 = ☐

Think of this as 10% + 5%

2. 15% of 440 = ☐

3. Write $\frac{14}{6}$ as a mixed number in its simplest form ☐ ☐/☐

You are revising multiplying and dividing fractions by whole numbers (Meeting Y6 expectations)

THIRD SPACE LEARNING

Revision on multiplying and dividing fractions by whole numbers

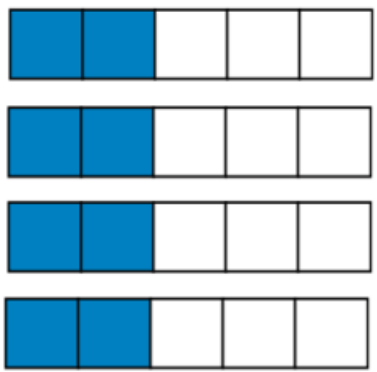
Today we are going to revise how to:

- multiply fractions by whole numbers and by fractions
- divide fractions by whole numbers

You are revising multiplying and dividing fractions by whole numbers (Meeting Y6 expectations)

Revision: Multiplying fractions by whole numbers and by fractions

1. $\frac{2}{5} \times 4$



How many 'fifths' can you see?

$\frac{2}{5} \times \frac{4}{1} = \frac{\square}{\square}$

2. $\frac{1}{2} \times \frac{3}{4}$

This is the same as saying 'half of $\frac{3}{4}$'

Split this $\frac{3}{4}$ in half. What are the parts called now?

How many of these parts are shaded in one half?

$\frac{1}{2} \times \frac{3}{4} = \frac{\square}{\square}$

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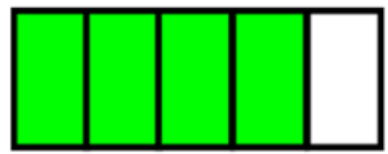
Revision: Dividing fractions by whole numbers

1. $\frac{4}{5} \div 2$

What does this mean? can you draw a line on this diagram to represent this?



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

Remember: multiplication and division are **inverse operations**. Dividing by two is the same as multiplying by a half; dividing by four is the same as multiplying by a quarter and so on.

So, $\frac{4}{5} \times \frac{1}{2} = \frac{\square}{\square} = \frac{\square}{\square}$

THIRD SPACE LEARNING

Question 1

1. What do you notice?
2. What do you know?
3. Can you show your working out?
4. How could you extend the question?

Complete

a) $\frac{5}{8} \div 4 =$ ☐

b) $\frac{6}{8} \times 3 =$ ☐

Can you simplify the above answer?

You are revising multiplying and dividing fractions by whole numbers (Meeting Y6 expectations)

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Question 2

1. What do you notice?
2. What do you know?
3. Can you show your working out?
4. How could you extend the question?

Complete

$$\frac{1}{9} \times \square = 15$$

You are revising multiplying and dividing fractions by whole numbers (Meeting Y6 expectations)

THIRD SPACE LEARNING

Let's review:

- multiply fractions by whole numbers and by fractions
- divide fractions by whole numbers

Draw a circle around the smiley face to show how you feel about what we've just been doing.



You are revising multiplying and dividing fractions by whole numbers (Meeting Y6 expectations)

THIRD SPACE LEARNING

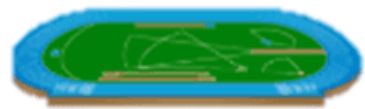
CHALLENGE

1. What do you notice?
2. What do you know?
3. Can you show your working out?
4. How could you extend the question?

Complete

Ten runners each run $3\frac{2}{5}$ laps of a track. How far did they run altogether?

Write your answer in its simplest form.



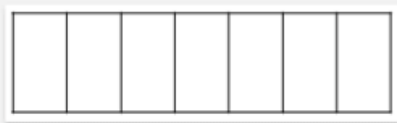
THIRD SPACE LEARNING

Multiplying fractions by whole numbers

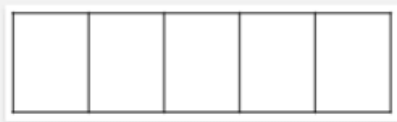
Colour the pictures to show how to find the answers.

Write the answers. Then write the additions for these problems

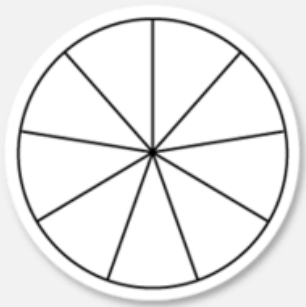
1.

$3 \times \frac{2}{7} =$  $= \frac{\quad}{\quad} = \frac{2}{7} + \frac{2}{7} + \frac{2}{7}$

2.

$4 \times \frac{1}{5} =$  $= \frac{\quad}{\quad} =$

3.

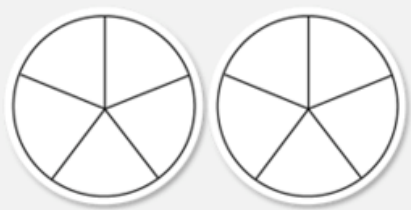
$3 \times \frac{2}{9} =$  $= \frac{\quad}{\quad} =$

Multiplying whole numbers by fractions

Knowing that × can mean 'of', use the diagrams to help you work out the answers. Then write the additions that show these problems.

1. $\frac{1}{2} \times 7 =$  $=$ ☐ $=$ ☐

2. $\frac{2}{3} \times 9 =$  $=$ ☐ $=$ ☐

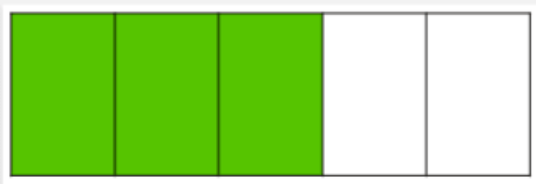
3. $\frac{2}{5} \times 2 =$  $=$ ☐ $=$ ☐

THIRD SPACE LEARNING

Divide fractions by whole numbers (easy questions)

Work out the answers by sharing fairly.

1. $\frac{3}{5} \div 3 =$ ☐



2. $\frac{8}{9} \div 4 =$ ☐

Divide fractions by whole numbers (preparation for harder questions)

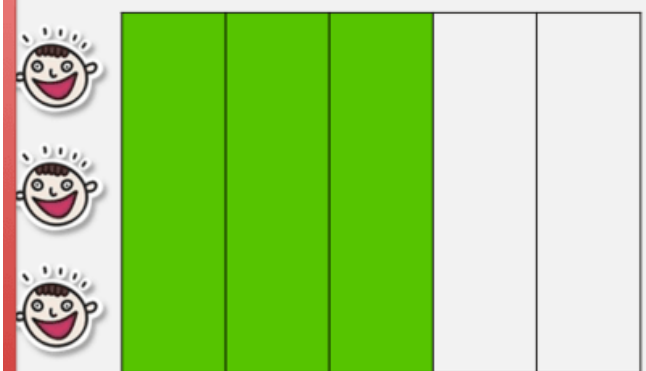
Draw horizontal lines across the rectangles to share fairly.

Do you get the same answers as before?

Did you simplify the fractions?

1. $\frac{3}{5} \div 3 =$ ☐

2. $\frac{8}{9} \div 4 =$ ☐



You are revising multiplying and dividing fractions by whole numbers (Meeting Y6 expectations)