

06.01.21 Fluent in five

1) $40 \times 9 =$

2) $2589 \times 6 =$

3) $704 \times 58 =$

4) $8000 \div 800 =$

5) 5^3

6) $(55 - 5) + 3 =$

1) $7 \times 4 =$

2) $36 - 6 =$

3) $\begin{array}{r} 1 \\ 4 \end{array} \begin{array}{r} 1 \\ 8 \end{array}$

4) $3842 + 1230 =$

5) $6438 - 3713 =$

WALT divide fractions by integers

Today we are focusing on dividing fractions by integers.

Today we will need to focus on the denominators.

Video link - <https://vimeo.com/480707655>

How would we work this one out?

$$\frac{1}{4} \div 2 =$$

$$\frac{2}{4} \div 2 =$$

<i>1/2</i>	<i>1/2</i>		
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<i>1/4</i>			
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What about this one?

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

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

What about this one?

$$\frac{4}{9} \div 3 =$$

$$\frac{15}{20} \div 3 =$$

Try these

$$\frac{1}{4} \div 3 =$$

$$\frac{3}{7} \div 5 =$$

$$\frac{6}{9} \div 7 =$$

$$\frac{3}{4} \div 4 =$$

$$\frac{6}{9} \div 2 =$$

$$\frac{4}{7} \div 4 =$$

Varied Fluency



Mo is dividing $\frac{1}{3}$ by 2



I have divided one third into 2 equal parts. Each part is worth $\frac{1}{6}$

$$\frac{1}{3} \div 2 = \frac{1}{6}$$



Draw diagrams to calculate:

$$\frac{1}{3} \div 3 = \quad \frac{2}{3} \div 3 = \quad \frac{1}{5} \div 3 = \quad \frac{2}{5} \div 3 =$$

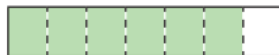
Use the diagrams to help complete the calculations.

a)



$$\frac{4}{5} \div 4 = \boxed{}$$

c)



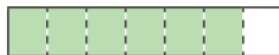
$$\frac{6}{7} \div 2 = \boxed{}$$

b)



$$\frac{3}{5} \div 3 = \boxed{}$$

d)



$$\frac{6}{7} \div 3 = \boxed{}$$

Annie is dividing $\frac{2}{3}$ by 4

The numerator isn't a multiple of the integer I am dividing by so I will find an equivalent fraction to help me divide the numerator equally.

Find equivalent fractions to calculate:

$\frac{3}{5} \div 2$ $\frac{1}{3} \div 3$ $\frac{2}{3} \div 3$

$\frac{2}{3} = \frac{4}{6}$ $\frac{4}{6} \div 4 = \frac{1}{6}$

Calculate the weights.

a)



b)



Huan shares $\frac{8}{10}$ of a litre of juice equally between 4 glasses.
How much juice is in each glass?



Alex says,



I can only divide a fraction by an integer if the numerator is a multiple of the divisor.

Do you agree?
Explain why.

Complete the divisions.

a) $\square = \frac{4}{5} \div 2$

b) $\frac{12}{25} \div \square = \frac{4}{25}$

$\square = \frac{4}{10} \div 4$

$\frac{12}{25} \div \square = \frac{3}{25}$

$\square = \frac{4}{20} \div 4$

$\frac{12}{25} \div \square = \frac{2}{25}$

$\square = \frac{2}{10} \div 2$

$\frac{\square}{25} \div 6 = \frac{4}{25}$

Calculate the missing fractions and integers.

$$\square \div 4 = \frac{7}{36}$$

$$\frac{3}{20} \div \square = \frac{3}{80}$$

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

Is there more than one possibility?

Mo works out $\frac{10}{25} \div 5$



The answer is $\frac{2}{5}$

a) What mistake has Mo made?

07/01/21

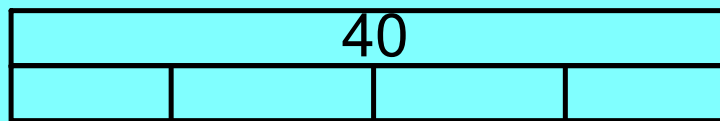
WALT find fraction of
amounts

This lesson we are going to be learning how to find fraction of an amount

Video link - <https://vimeo.com/480708541>

To do this, we need to take the whole number and split it into the amount of sections (the denominator). For example

$$\frac{1}{4} \text{ of } 40 =$$

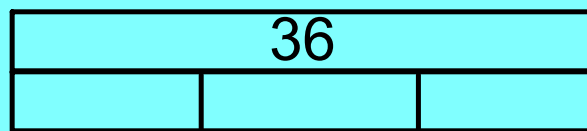


What about?

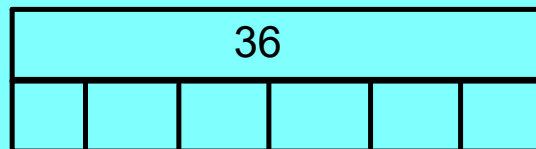
$$\frac{3}{4} \text{ of } 40 =$$

In pairs try this one.

$$\frac{1}{3} \text{ of } 36 =$$



$$\frac{1}{6} \text{ of } 36 =$$



Try these on whiteboards

$$\frac{1}{5} \text{ of } 80 =$$

$$\frac{1}{4} \text{ of } 60 =$$

$$\frac{3}{4} \text{ of } 60 =$$

$$\frac{1}{2} \text{ of } 20 =$$

$$\frac{1}{4} \text{ of } 20 =$$

$$\frac{2}{5} \text{ of } 20 =$$

Try these in your books

$$\frac{1}{4} \text{ of } 40 =$$

$$\frac{1}{8} \text{ of } 32 =$$


$$\frac{3}{7} \text{ of } 49 =$$

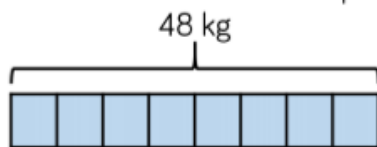
$$\frac{1}{5} \text{ of } 80 =$$


$$\frac{1}{4} \text{ of } 60 =$$

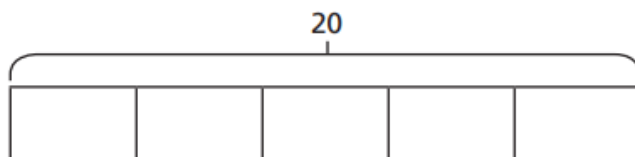
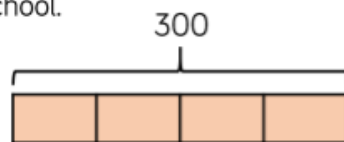
$$\frac{3}{4} \text{ of } 60 =$$

Varied Fluency

-  A cook has 48 kg of potatoes. He uses $\frac{5}{8}$ of the potatoes. How many kilograms of the potatoes does he have left?
Use the bar model to find the answer to this question.



-  A football team has 300 tickets to give away. They give $\frac{3}{4}$ of them to a local school. How many tickets are left?



a) Shade $\frac{1}{5}$ of the bar model.

b) What is $\frac{1}{5}$ of 20?



Calculate:

$$\frac{1}{5} \text{ of } 30 = \quad \frac{1}{5} \text{ of } 60 = \quad \frac{1}{5} \text{ of } 120 = \quad \frac{1}{5} \text{ of } 240 =$$

$$\frac{2}{5} \text{ of } 30 = \quad \frac{1}{5} \text{ of } 600 = \quad \frac{1}{10} \text{ of } 120 = \quad \frac{6}{5} \text{ of } 240 =$$

$$\frac{4}{5} \text{ of } 30 = \quad \frac{1}{5} \text{ of } 6,000 = \quad \frac{1}{20} \text{ of } 120 = \quad \frac{11}{5} \text{ of } 240 =$$

Use your times tables knowledge to solve the calculations.

a) $\frac{1}{3}$ of 12 =

d) $\frac{1}{10}$ of 80 cm =

b) $\frac{1}{4}$ of £20 =

e) $\frac{1}{12}$ of 60 =

c) $\frac{1}{5}$ of 35 m =

f) $\frac{1}{7}$ of 84 kg =

Now use your answers to solve these calculations.

a) $\frac{2}{3}$ of 12 =

d) $\frac{7}{10}$ of 80 cm =

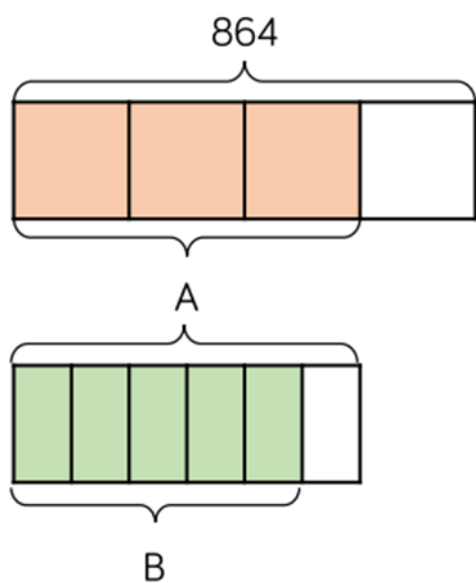
b) $\frac{3}{4}$ of £20 =

e) $\frac{11}{12}$ of 60 =

c) $\frac{3}{5}$ of 35 m =

f) $\frac{6}{7}$ of 84 kg =

What is the value of A?
What is the value of B?



a) In a school of 480 pupils, $\frac{2}{3}$ are juniors.
How many juniors are in the school?

b) A factory makes 256 cars.
 $\frac{3}{8}$ are electric cars.
How many electric cars does the factory make?

Two fashion designers receive $\frac{3}{8}$ of 208 metres of material.

One of them says:



We each
receive 26 m

Is she correct?
Explain your reasoning.

Fill in the missing numbers.

a) $\frac{\boxed{}}{10}$ of \$500 = \$150

c) $42 = \frac{\boxed{}}{100}$ of 700

b) $\frac{\boxed{}}{4}$ of 100 kg = 75 kg

d) $450 = \frac{\boxed{}}{20}$ of 3,000

Calculate the missing digits.

$$\frac{3}{8} \text{ of } 40 = \frac{?}{10} \text{ of } 150$$

$$\frac{1}{5} \text{ of } 315 = \frac{?}{8} \text{ of } 72$$



Alex has 288 m of fence to paint.

She paints $\frac{3}{12}$ of the whole fence on Monday. She then paints $\frac{1}{2}$ of what is left on Tuesday.

How much fence does she have left to paint?

