

Hello children. I am so pleased to see that you are keeping up with your maths learning. I know it can be tricky working this way but just do your best and contact me on Padlet with any concerns.

Before our main task we are going to work on an activity mat. If a question requires you to shade you can leave out the question or draw the shape in your book.

Activity mat 1 will be a little less challenging.

Activity mat 2 will be more challenging.

The challenge mat is optional as the main task takes a lot of time.

You may wish to try 2 or 3 questions before going on to the main task or you might want to move straight on to the main task. The choice is yours. Please choose **just 1 maths mat** to complete before starting the main task.

# Maths Mat 1 -

## Section 1

Order these numbers from smallest to largest:  
6788 8677 7866 8766

--	--	--	--



## Section 2

Fill in the missing numbers on this number line:

	4			0				6	
--	---	--	--	---	--	--	--	---	--

## Section 3

Convert these times to 24 hour clock:

a. 1.34pm =

b. 10.43pm =

c. 4.22pm =

d. 9.12pm =



## Section 4

A postman drives 42 miles a day.  
How many miles will he drive in  
5 days to the nearest 10 miles?  
Nearest 100 miles?

nearest 10 miles =

nearest 100 miles =

## Section 6

Milly has a piece of ribbon 75cm long.  
She cuts it into 3 equal pieces. How long  
is each piece?

## Section 7

Asha bought a bag priced at £10.25 and  
a hair brush for £2.50. How much did she  
spend altogether?

## Section 5

Fill in the missing numbers:

$$\begin{array}{r} 8 \quad 7 \quad 1 \\ - 1 \quad 9 \quad 9 \\ \hline 6 \quad 7 \quad \square \end{array}$$

## Section 8

Write the decimals which match  
the fractions:

	Decimal
$\frac{1}{10}$	
$\frac{3}{4}$	

## Mat 2 - challenging questions

For questions 7, remember, the angles in a circle add up to 360 and opposite angles are the same.

### Section 1

Order the following numbers from smallest to largest.

56 892   52 698   52 689   56 298   56 289

--	--	--	--	--

smallest

largest

### Section 2

Mr and Mrs Ahmed and their 3 children visit the zoo. Adult tickets are priced £8.50 and child tickets are priced £4.75. How much change will Mr Ahmed get from £50?

### Section 3

Eric wants some pizzas cut into 20 pieces. He could have two pizzas cut into 10 pieces. Explain 3 other ways he could share some pizzas into 20 pieces.

\_\_\_ pizzas cut into \_\_\_ pieces.

\_\_\_ pizzas cut into \_\_\_ pieces.

\_\_\_ pizzas cut into \_\_\_ pieces.

### Section 4

Match the mixed fractions and improper fractions.

$$\frac{13}{4} \quad 1\frac{3}{4}$$

$$\frac{9}{4} \quad 2\frac{1}{4}$$

$$\frac{7}{4} \quad 3\frac{1}{4}$$

### Section 5

Write the equivalent to the fractions and decimal fractions.

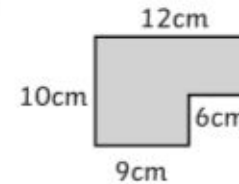
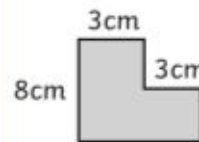
$$\frac{3}{4} =$$

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

$$= 0.625$$

### Section 6

Calculate the perimeter of these rectilinear shapes:



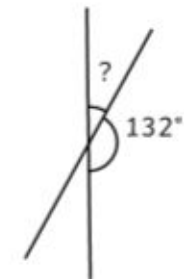
### Section 8

Estimate the capacity of a large carton of orange juice in millilitres.



### Section 7

Calculate the missing angle:



For the main task we are going to continue to work from the White Rose site. We are going to multiply unit and non-unit fractions by an integer. There are a lot of activities to do so please do not feel that you must complete them all.

Please follow the link carefully.

Please let the video guide you when tackling the activity.

1. Copy or click on the link (press Ctrl then click) <https://whiterosemaths.com/homelearning/>

Then click Year 5

The screenshot shows the White Rose Maths Home Learning page. At the top, there is a 'Summer Term Plans' banner with a 'Click here for more details' button. Below this is a 'Hello there, Parents and Carers!' section with introductory text. The main content area is a grid of navigation buttons: 'Early Years', 'Year 1', 'Year 2', 'Year 3', 'Year 4', 'Year 5', 'Year 6', 'Year 7', 'Year 8', 'Year 9', 'Year 10', and 'By Topic'. A blue arrow points to the 'Year 5' button with the word 'click' written next to it. To the right of the grid is a vertical sidebar menu with 'Home Learning' at the top, followed by 'Summer Term', 'Easter Fun', 'Home Learning - Early Years', and a list of 'Home Learning - Year 1' through 'Home Learning - Year 10'.


Summer Term - Week 6 (w/c 1st June)

[Click](#)

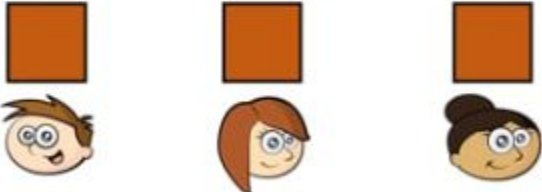
**First, watch the video to support your learning and use it to work on the activity sheets below.**

Summer Term - Week 6 (w/c 1st June)


## Lesson 1 - Multiply unit and non-unit fractions by integers

Multiply unit and non-unit fractions by integers 

3 children are given  $\frac{1}{4}$  of a chocolate bar.



How much chocolate do they have altogether?

08:34 

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Looking for the worksheet? [check if they have a subscription](#).  
Alternatively, [read more](#) from [BBC Bitesize](#).

## Multiply unit fractions by an integer

1 Complete the calculations.

Use the bar models to help you.



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

$$3 \times \frac{1}{5} = \square$$



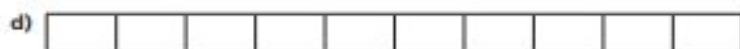
$$\frac{1}{7} + \frac{1}{7} + \frac{1}{7} + \frac{1}{7} = \square$$

$$4 \times \frac{1}{7} = \square$$



$$\frac{1}{8} + \frac{1}{8} + \frac{1}{8} + \frac{1}{8} + \frac{1}{8} = \square$$

$$5 \times \frac{1}{8} = \square$$



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

$$7 \times \frac{1}{10} = \square$$



2 Complete the multiplications.

a)  $3 \times \frac{1}{8} = \square$

e)  $\frac{1}{5} \times 4 = \square$

b)  $3 \times \frac{1}{10} = \square$

f)  $\frac{1}{9} \times 8 = \square$

c)  $\frac{1}{8} \times 5 = \square$

g)  $8 \times \frac{1}{11} = \square$

d)  $9 \times \frac{1}{10} = \square$

h)  $\frac{1}{11} \times 10 = \square$

3 Match the addition to the equivalent multiplication.

$$\frac{1}{3} + \frac{1}{3}$$

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

$$\frac{1}{5} + \frac{1}{5} + \frac{1}{5}$$

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

$$\frac{1}{5} + \frac{1}{5}$$

$$3 \times \frac{1}{5}$$

$$\frac{1}{4} + \frac{1}{4} + \frac{1}{4}$$

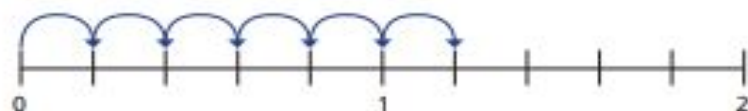
$$2 \times \frac{1}{3}$$

- 4 A pizza is cut into sixths.  
Jack eats five of the slices.  
Write a multiplication to represent this.

$$\square \times \square = \square$$

- 5 Complete the multiplications.  
Use the number lines to help you.  
Give each answer as an improper fraction and as a mixed number.

a)



$$6 \times \frac{1}{5} = \square = \square$$

b)



$$9 \times \frac{1}{5} = \square = \square$$

- 6 Complete the multiplications.

a)  $11 \times \frac{1}{10} = \square = \square$

b)  $11 \times \frac{1}{9} = \square = \square$

c)  $\frac{1}{8} \times 11 = \square = \square$

d)  $11 \times \frac{1}{7} = \square = \square$

e)  $11 \times \frac{1}{6} = \square = \square$

What do you notice?

Does this pattern continue?

- 7 Complete the calculations.

a)  $\square \times \frac{1}{3} = \frac{2}{3}$

e)  $\frac{1}{8} \times \square = 1\frac{3}{8}$

b)  $\square \times \frac{1}{3} = 1$

f)  $\square \times \frac{1}{2} = 3\frac{1}{2}$

c)  $\square \times \frac{1}{7} = 1$

g)  $\square \times \frac{1}{3} = 3\frac{1}{3}$

d)  $\frac{1}{7} \times \square = 1\frac{3}{7}$

h)  $\frac{1}{4} \times \square = 3\frac{1}{4}$



## Multiply non-unit fractions by an integer

1 Complete the calculations.

Use the bar models to help you.



$$\frac{2}{7} + \frac{2}{7} + \frac{2}{7} = \square$$

$$3 \times \frac{2}{7} = \square$$



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

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



$$\frac{2}{9} + \frac{2}{9} + \frac{2}{9} + \frac{2}{9} = \square$$

$$4 \times \frac{2}{9} = \square$$



$$\frac{4}{9} + \frac{4}{9} = \square$$

$$2 \times \frac{4}{9} = \square$$

What do you notice about parts c) and d)? Talk to a partner.



2 Complete the multiplications.

a)  $2 \times \frac{3}{7} = \square$

d)  $5 \times \frac{2}{11} = \square$

b)  $3 \times \frac{3}{11} = \square$

e)  $\frac{2}{15} \times 7 = \square$

c)  $\frac{2}{11} \times 4 = \square$

f)  $\frac{7}{15} \times 2 = \square$

3

$$\frac{4}{11} \times 2 = \frac{8}{22}$$



Explain the mistake that Alex has made.

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4

A cat eats  $\frac{2}{15}$  of a bag of biscuits a day.

What fraction of the bag does the cat eat in 4 days?



The cat eats  $\square$  of the bag in 4 days.

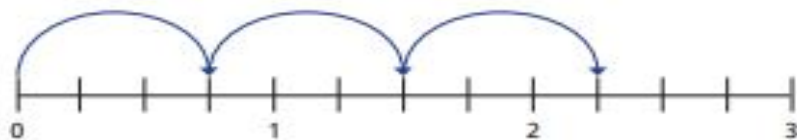


5 Complete the multiplications.

Use the number lines to help you.

Give each answer as an improper fraction and as a mixed number.

a)



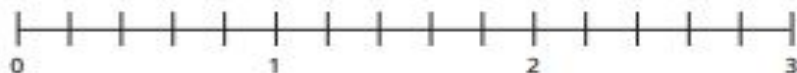
$$3 \times \frac{3}{4} = \boxed{\phantom{00}} = \boxed{\phantom{00}}$$

b)



$$4 \times \frac{3}{5} = \boxed{\phantom{00}} = \boxed{\phantom{00}}$$

c)



$$3 \times \frac{4}{5} = \boxed{\phantom{00}} = \boxed{\phantom{00}}$$



6 Complete the multiplications.

a)  $5 \times \frac{2}{3} = \boxed{\phantom{00}} = \boxed{\phantom{00}}$

b)  $4 \times \frac{4}{5} = \boxed{\phantom{00}} = \boxed{\phantom{00}}$

c)  $\frac{2}{7} \times 11 = \boxed{\phantom{00}} = \boxed{\phantom{00}}$

d)  $4 \times \frac{7}{9} = \boxed{\phantom{00}} = \boxed{\phantom{00}}$

e)  $17 \times \frac{2}{11} = \boxed{\phantom{00}} = \boxed{\phantom{00}}$

f) Describe the pattern you can see in the answers.

g) What could the next multiplication in the pattern be?

Write two possible options.

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7 Here are some digit cards.



Use the digit cards to complete the multiplication.

$$\boxed{\phantom{00}} \times \frac{\boxed{\phantom{00}}}{8} = \frac{15}{8} = \boxed{\phantom{00}} \frac{\boxed{\phantom{00}}}{8}$$

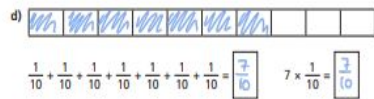
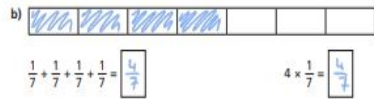
# Answers

## Multiply unit fractions by an integer



1 Complete the calculations.

Use the bar models to help you.



2 Complete the multiplications.

a)  $3 \times \frac{1}{8} = \frac{3}{8}$

e)  $\frac{1}{5} \times 4 = \frac{4}{5}$

b)  $3 \times \frac{1}{10} = \frac{3}{10}$

f)  $\frac{1}{9} \times 8 = \frac{8}{9}$

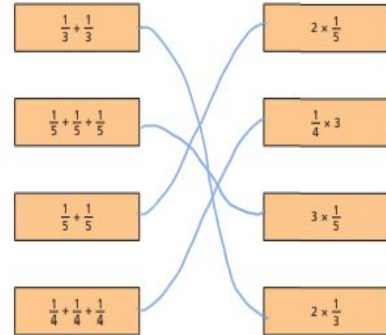
c)  $\frac{1}{8} \times 5 = \frac{5}{8}$

g)  $8 \times \frac{1}{11} = \frac{8}{11}$

d)  $9 \times \frac{1}{10} = \frac{9}{10}$

h)  $\frac{1}{11} \times 10 = \frac{10}{11}$

3 Match the addition to the equivalent multiplication.



4 A pizza is cut into sixths.

Jack eats five of the slices.

Write a multiplication to represent this.

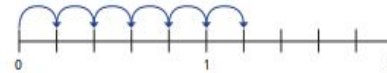
$5 \times \frac{1}{6} = \frac{5}{6}$

5 Complete the multiplications.

Use the number lines to help you.

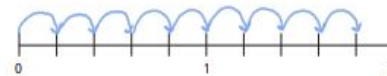
Give each answer as an improper fraction and as a mixed number.

a)



$6 \times \frac{1}{5} = \frac{6}{5} = 1\frac{1}{5}$

b)



$9 \times \frac{1}{4} = \frac{9}{4} = 2\frac{1}{4}$

6 Complete the multiplications.

a)  $11 \times \frac{1}{10} = \frac{11}{10} = 1\frac{1}{10}$

b)  $11 \times \frac{1}{9} = \frac{11}{9} = 1\frac{2}{9}$

c)  $\frac{1}{8} \times 11 = \frac{11}{8} = 1\frac{3}{8}$

d)  $11 \times \frac{1}{7} = \frac{11}{7} = 1\frac{4}{7}$

e)  $11 \times \frac{1}{6} = \frac{11}{6} = 1\frac{5}{6}$

What do you notice?

Does this pattern continue?

7 Complete the calculations.

a)  $2 \times \frac{1}{3} = \frac{2}{3}$

e)  $\frac{1}{8} \times 11 = 1\frac{3}{8}$

b)  $3 \times \frac{1}{3} = 1$

f)  $7 \times \frac{1}{2} = 3\frac{1}{2}$

c)  $7 \times \frac{1}{7} = 1$

g)  $10 \times \frac{1}{3} = 3\frac{1}{3}$

d)  $\frac{1}{7} \times 10 = 1\frac{3}{7}$

h)  $\frac{1}{4} \times 13 = 3\frac{1}{4}$



# Multiply non-unit fractions by an integer

Use  
Maths

1 Complete the calculations.

Use the bar models to help you.



$$\frac{2}{7} + \frac{2}{7} + \frac{2}{7} = \frac{6}{7}$$

$$3 \times \frac{2}{7} = \frac{6}{7}$$



$$\frac{3}{10} + \frac{3}{10} + \frac{3}{10} = \frac{9}{10}$$

$$3 \times \frac{3}{10} = \frac{9}{10}$$



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

$$4 \times \frac{2}{9} = \frac{8}{9}$$



$$\frac{4}{9} + \frac{4}{9} = \frac{8}{9}$$

$$2 \times \frac{4}{9} = \frac{8}{9}$$

What do you notice about parts c) and d)? Talk to a partner.



2 Complete the multiplications.

a)  $2 \times \frac{3}{7} = \frac{6}{7}$

d)  $5 \times \frac{2}{11} = \frac{10}{11}$

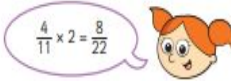
b)  $3 \times \frac{3}{11} = \frac{9}{11}$

e)  $\frac{2}{15} \times 7 = \frac{14}{15}$

c)  $\frac{2}{11} \times 4 = \frac{8}{11}$

f)  $\frac{7}{15} \times 2 = \frac{14}{15}$

3



Explain the mistake that Alex has made.

She has multiplied both the numerator and the denominator.

$$\frac{4}{11} \times 2 = \frac{8}{22}$$

4 A cat eats  $\frac{2}{15}$  of a bag of biscuits a day.

What fraction of the bag does the cat eat in 4 days?



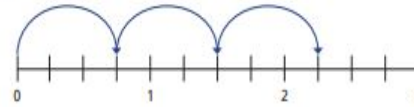
The cat eats  $\frac{8}{15}$  of the bag in 4 days.

5 Complete the multiplications.

Use the number lines to help you.

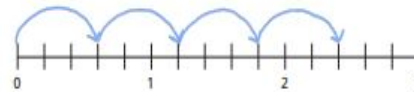
Give each answer as an improper fraction and as a mixed number.

a)



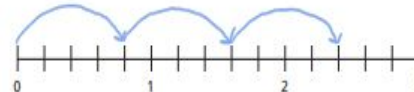
$$3 \times \frac{3}{4} = \frac{9}{4} = 2\frac{1}{4}$$

b)



$$4 \times \frac{2}{5} = \frac{8}{5} = 1\frac{3}{5}$$

c)



$$3 \times \frac{4}{5} = \frac{12}{5} = 2\frac{2}{5}$$



6 Complete the multiplications.

a)  $5 \times \frac{2}{3} = \frac{10}{3} = 3\frac{1}{3}$

b)  $4 \times \frac{4}{5} = \frac{16}{5} = 3\frac{1}{5}$

c)  $\frac{2}{7} \times 11 = \frac{22}{7} = 3\frac{1}{7}$

d)  $4 \times \frac{7}{9} = \frac{28}{9} = 3\frac{1}{9}$

e)  $17 \times \frac{2}{11} = \frac{34}{11} = 3\frac{1}{11}$

f) Describe the pattern you can see in the answers.

g) What could the next multiplication in the pattern be?

Write two possible options.

e.g.  $\frac{5}{13} \times 8$   
 $10 \times \frac{4}{13}$

7 Here are some digit cards.



Use the digit cards to complete the multiplication.

$$5 \times \frac{3}{8} = \frac{15}{8} = 1\frac{7}{8}$$

Challenge mat answers 1-

### Section 1

Order these numbers from smallest to largest:  
6788 8677 7866 8766

6788	7866	8677	8766
------	------	------	------



### Section 2

Fill in the missing numbers on this number line:

-4	-2	0	2	4	6	8
----	----	---	---	---	---	---

### Section 3

Convert these times to 24 hour clock:

- a. 1.34pm = **13.34**
- b. 10.43pm = **22.43**
- c. 4.22pm = **16.22**
- d. 9.12pm = **21.12**



### Section 4

A postman drives 42 miles a day.  
How many miles will he drive in  
5 days to the nearest 10 miles?  
Nearest 100 miles?

nearest 10 miles = **210 miles**  
nearest 100 miles = **200 miles**

### Section 5

Fill in the missing numbers:

$$\begin{array}{r} 871 \\ - 199 \\ \hline 672 \end{array}$$

### Section 6

Milly has a piece of ribbon 75cm long.  
She cuts it into 3 equal pieces. How long  
is each piece?

**25cm**

### Section 7

Asha bought a bag priced at £10.25 and  
a hair brush for £2.50. How much did she  
spend altogether?

**£12.75**

### Section 8

Write the decimals which match  
the fractions:

	Decimal
$\frac{1}{10}$	<b>0.1</b>
$\frac{3}{4}$	<b>0.75</b>

## Challenge mat 2 answers -

### Section 1

Order the following numbers from smallest to largest.

56 892   52 698   52 689   56 298   56 289

52 689	52 698	56 289	56 298	56 892
--------	--------	--------	--------	--------

smallest

largest

### Section 2

Mr and Mrs Ahmed and their 3 children visit the zoo. Adult tickets are priced £8.50 and child tickets are priced £4.75. How much change will Mr Ahmed get from £50?

£18.75

### Section 3

Eric wants some pizzas cut into 20 pieces. He could have two pizzas cut into 10 pieces. Explain 3 other ways he could share some pizzas into 20 pieces.

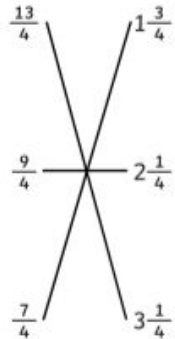
1/20 pizzas cut into 20/1 pieces.

2/10 pizzas cut into 10/2 pieces.

4/5 pizzas cut into 5/4 pieces.

### Section 4

Match the mixed fractions and improper fractions.



### Section 5

Write the equivalent to the fractions and decimal fractions.

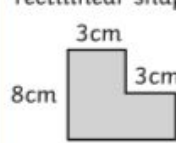
$$\frac{3}{4} = 0.75$$

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

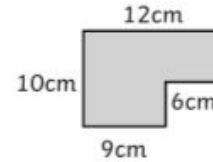
$$\frac{5}{8} = 0.625$$

### Section 6

Calculate the perimeter of these rectilinear shapes:



28cm



44cm

### Section 8

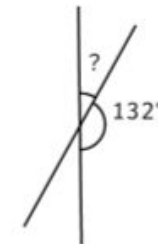
Estimate the capacity of a large carton of orange juice in millilitres.



1000ml/1 litre

### Section 7

Calculate the missing angle:



48°