

Monday 18<sup>th</sup> May Multiplying a fraction by an integer (whole number).

Weekly Arithmetic!

Here is a link for this week's arithmetic questions. <https://myminimaths.co.uk/year-6-arithmetic-practice-papers/>

Click on week 5 practice paper. All the week's questions are on one sheet - there are around 10 - 12 questions.

You can check your answers yourself, and if you have made any errors, see if you can work out why. Enjoy!

This week we will be following White Rose, continuing our work on fractions on the following pages.

If it is easier to access however, you can use BBC Bitesize on the red button on your TV, or any device.

**Access the red button at:** Freeview 601, Sky 981, Freesat 981 and Virgin Media 991.


BBC Bitesize daily also has its own section on the iplayer.

If you access through iplayer, you can select which programme to watch.

Programmes are in age groups, so year 6 will be ages 9-11.

Here is this week's schedule, so that you can complete this work instead.

**Year 6/ P7 online lessons**  
Monday 11 May - Friday 15 May



**BBC Bitesize**  
Daily lessons

Monday	Tuesday	Wednesday	Thursday	Friday
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**Maths**

Decimals: Multiply and divide decimals by 10, 100 and 1000

**Maths**

Decimals: Multiply decimals by integers

**Maths**

Decimals: Divide decimals by integers

**Maths**

Decimals: Convert from a decimal into a fraction and simplify

**Maths**

Challenge of the week

Follow these steps - use the video to help.

**Multiplying a Fraction by a Whole Number**

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

First, put the whole number over 1 so that it is a fraction.


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

Multiply the numerators together, and multiply the denominators together.

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

Can your answer be simplified?

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

 visit [twinkl.com](https://www.twinkl.com)

A

Match each question with the correct answer.

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

$$\frac{2}{5}$$

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

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

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

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

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

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

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

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

**B**

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

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

3.  $\frac{3}{4} \times 5 =$

4.  $\frac{3}{5} \times 3 =$

5.  $\frac{2}{4} \times 6 =$

**C**

6.  $\frac{2}{3} \times 8 =$

7.  $\frac{5}{6} \times 9 =$

8.  $\frac{5}{8} \times 4 =$

9.  $\frac{1}{2} \times 6 =$

10.  $\frac{4}{8} \times 7 =$

1. James is having a pizza party. Each person at the party eats  $\frac{3}{8}$  of a pizza. If 6 people attend the party, how many slices of pizza did James need?

\_\_\_\_\_

2. Lucy walked  $\frac{1}{6}$  of a kilometre each day for 8 days. How many kilometres did she walk in total?

\_\_\_\_\_

3. Tina swam  $\frac{3}{4}$  of a kilometre on Monday, Tuesday, Wednesday and Friday. How many kilometres did she swim in total?

\_\_\_\_\_

4. Jack baked some trays of brownies for his 5 friends. He is going to give each of his friends  $\frac{4}{6}$  of a tray. How many trays of brownies does he give away?

\_\_\_\_\_

5. Five children share some pizzas. Each child eats  $\frac{2}{3}$  of a pizza. How many pizzas are eaten?

\_\_\_\_\_

6. To bake a batch of cookies,  $\frac{1}{3}$  of a packet of sugar is needed. Chen needs to make 5 batches of cookies. How much sugar is used?

\_\_\_\_\_

7. Daisy attended a five-day French course, which lasted  $\frac{4}{5}$  of an hour each day. How many hours was the French course in total?



D

Convert the mixed number to an improper fraction to multiply.

$$2\frac{3}{5} \times 3 = \frac{13}{5} \times 3 = \frac{39}{5} = 7\frac{4}{5}$$

Use this method to calculate:

$$3 \times 2\frac{2}{5} \quad 1\frac{5}{7} \times 3 \quad 2 \times 1\frac{3}{4} \quad 2 \times 1\frac{1}{6}$$

Eva and Amir both work on a homework project.



Eva

I spent  $4\frac{1}{4}$  hours a week for 4 weeks doing my project.

I spent  $2\frac{3}{4}$  hours a week for 5 weeks doing my project.



Amir

Who spent the most time on their project?

Explain your reasoning.

## Answers

A

Match each question with the correct answer.

$\frac{1}{4} \times 3 =$	<input type="text"/>	$\frac{2}{5}$
$\frac{1}{5} \times 2 =$	<input type="text"/>	$\frac{4}{2} = 2$
$\frac{1}{4} \times 4 =$	<input type="text"/>	$\frac{3}{4}$
$\frac{1}{2} \times 4 =$	<input type="text"/>	$\frac{5}{3} = 2\frac{2}{3}$
$\frac{1}{3} \times 5 =$	<input type="text"/>	$\frac{4}{4} = 1$

B

- |                             |                               |                              |  |
|-----------------------------|-------------------------------|------------------------------|--|
| 1. $\frac{1}{2} \times 7 =$ | $\frac{7}{2} = 3\frac{1}{2}$  | 6. $\frac{2}{3} \times 8 =$  | $\frac{16}{3} = 5\frac{1}{3}$                |
| 2. $\frac{2}{3} \times 4 =$ | $\frac{8}{3} = 2\frac{2}{3}$  | 7. $\frac{5}{6} \times 9 =$  | $\frac{45}{6} = 7\frac{3}{6} = 7\frac{1}{2}$ |
| 3. $\frac{3}{4} \times 5 =$ | $\frac{15}{4} = 3\frac{3}{4}$ | 8. $\frac{5}{8} \times 4 =$  | $\frac{20}{8} = 2\frac{4}{8} = 2\frac{1}{2}$ |
| 4. $\frac{3}{5} \times 3 =$ | $\frac{9}{5} = 1\frac{4}{5}$  | 9. $\frac{1}{2} \times 6 =$  | $\frac{6}{2} = 3$                            |
| 5. $\frac{2}{4} \times 6 =$ | $\frac{12}{4} = 3$            | 10. $\frac{4}{8} \times 7 =$ | $\frac{28}{8} = 3\frac{4}{8} = 3\frac{1}{2}$ |

1. James is having a pizza party. Each person at the party eats  $\frac{3}{8}$  of a pizza. If 6 people attend the party, how many slices of pizza did James need?

$$6 \times \frac{3}{8} = \frac{18}{8} = 2 \frac{2}{8} = 2 \frac{2}{8} = 2 \frac{1}{4} \text{ pizzas}$$

2. Lucy walked  $\frac{1}{6}$  of a kilometre each day for 8 days. How many kilometres did she walk in total?

$$8 \times \frac{1}{6} = \frac{8}{6} = 1 \frac{2}{6} = 1 \frac{1}{3} \text{ km}$$

3. Tina swam  $\frac{3}{4}$  of a kilometre on Monday, Tuesday, Wednesday and Friday. How many kilometres did she swim in total?

$$4 \times \frac{3}{4} = \frac{12}{4} = 3 \text{ km}$$

4. Jack baked some trays of brownies for his 5 friends. He is going to give each of his friends  $\frac{4}{6}$  of a tray. How many trays of brownies does he give away?

$$5 \times \frac{4}{6} = \frac{20}{6} = 3 \frac{2}{6} = 3 \frac{1}{3} \text{ trays}$$

5. Five children share some pizzas. Each child eats  $\frac{2}{3}$  of a pizza. How many pizzas are eaten?

$$5 \times \frac{2}{3} = \frac{10}{3} = 3 \frac{1}{3} \text{ pizzas}$$

6. To bake a batch of cookies,  $\frac{1}{3}$  of a packet of sugar is needed. Chen needs to make 5 batches of cookies. How much sugar is used?

$$5 \times \frac{1}{3} = \frac{5}{3} = 1 \frac{2}{3} \text{ bags of sugar}$$

7. Daisy attended a five-day French course, which lasted  $\frac{4}{5}$  of an hour each day. How many hours was the French course in total?

$$5 \times \frac{4}{5} = \frac{20}{5} = 4 \text{ hours}$$

D

Convert the mixed number to an improper fraction to multiply.

$$2\frac{3}{5} \times 3 = \frac{13}{5} \times 3 = \frac{39}{5} = 7\frac{4}{5}$$

Use this method to calculate:

$$3 \times 2\frac{2}{5} \quad 1\frac{5}{7} \times 3 \quad 2 \times 1\frac{3}{4} \quad 2 \times 1\frac{1}{6}$$

$$\frac{36}{5} = 7\frac{1}{5} \quad \frac{36}{7} = 5\frac{1}{7} \quad \frac{14}{4} = \frac{7}{2} = 3\frac{1}{2} \quad \frac{14}{6} = 2\frac{2}{6} = 2\frac{1}{3}$$

Eva and Amir both work on a homework project.



Eva

I spent  $4\frac{1}{4}$  hours a week for 4 weeks doing my project.

I spent  $2\frac{3}{4}$  hours a week for 5 weeks doing my project.



Amir

Who spent the most time on their project?

Explain your reasoning.

$$4 \times 4\frac{1}{4} = \frac{68}{4}$$

$$= 17 \text{ hours}$$

$$5 \times 2\frac{3}{4} = \frac{55}{4}$$

$$= 13\frac{3}{4} \text{ hours}$$

Eva spent  $3\frac{1}{4}$  hours longer on her project than Amir did.