

11+ Maths Practice Paper

Year 4 · Foundation

Lesson 3.4: Multiplying and dividing fractions

Read this with your child:

1. This paper has **20 questions** in two parts. Work through them in order. The questions get harder as you go.
2. **Part 1** is multiple choice. Choose **one** answer, A, B, C, D or E, and mark it on the separate answer sheet by drawing a firm line through the box next to its letter. If you change your mind, rub the line out completely and mark your new answer.
3. **Part 2** asks you to write your answer. Write it in the boxes on the answer sheet, **one digit in each box**, starting from the left.
4. If a question is hard, leave it and come back to it at the end.
5. You may use rough paper for working out. You may **not** use a calculator.
6. Suggested time: **25 minutes**.

The answer sheet is after the questions. The answers, with a short explanation of each, are at the back for a parent to mark with.

These are original practice questions written by Elite Learners in the style of 11+ entrance tests. They are not produced by, or connected with, GL Assessment or Cambridge University Press & Assessment (CEM).

Example

Work out this calculation.

$$2 \times \frac{1}{5} = \boxed{?}$$

A $\frac{2}{10}$

B $\frac{2}{5}$

C $\frac{3}{5}$

D $\frac{1}{10}$

E $\frac{3}{10}$

Answer: B $2 \times \frac{1}{5}$ is $\frac{1}{5} + \frac{1}{5}$. Multiply the top only: $2 \times 1 = 2$, so $\frac{2}{5}$.

The answer, B, has already been marked on your answer sheet.

Now turn over and start Part 1.

Part 1: Multiple choice

1

Work out this calculation.

$$3 \times \frac{1}{7} = \boxed{?}$$

A $\frac{3}{21}$

B $\frac{1}{21}$

C $\frac{4}{7}$

D $\frac{3}{14}$

E $\frac{3}{7}$

2

Work out this calculation. Give your answer in its simplest form.

$$2 \times \frac{3}{8} = \boxed{?}$$

A $\frac{3}{4}$

B $\frac{6}{16}$

C $\frac{5}{8}$

D $\frac{3}{16}$

E $\frac{1}{4}$

3

Which is the same as $\frac{2}{9} + \frac{2}{9} + \frac{2}{9}$?

A $\frac{2}{9} \times \frac{2}{9}$

B $3 + \frac{2}{9}$

C $3 \times \frac{2}{9}$

D $\frac{6}{27}$

E $\frac{2}{27}$

4

Work out this calculation.

$$4 \times \frac{1}{4} = \boxed{?}$$

A $\frac{4}{16}$

B 1

C $\frac{1}{16}$

D 4

E $\frac{1}{8}$

5

Each cup holds $\frac{1}{4}$ of a litre. Mia fills 3 cups.

How much does she pour altogether?

- A $\frac{3}{12}$ of a litre
- B $\frac{1}{12}$ of a litre
- C $\frac{1}{7}$ of a litre
- D $\frac{3}{4}$ of a litre
- E 1 litre

6

Work out this calculation.

$$5 \times \frac{1}{3} = \boxed{?}$$

- A $1\frac{2}{3}$
- B $\frac{5}{15}$
- C $2\frac{1}{3}$
- D $\frac{1}{15}$
- E $1\frac{1}{3}$

7

What is $\frac{1}{2}$ of $\frac{1}{4}$?

- A $\frac{2}{4}$
- B $\frac{1}{6}$
- C $\frac{2}{6}$
- D $\frac{3}{4}$
- E $\frac{1}{8}$

8

Work out this calculation.

$$\frac{1}{2} \div 2 = \boxed{?}$$

- A $\frac{1}{2}$
- B 1
- C $\frac{1}{4}$
- D $\frac{1}{3}$
- E $\frac{1}{6}$

9

Work out this calculation. Give your answer in its simplest form.

$$3 \times \frac{2}{9} = \boxed{?}$$

A $\frac{6}{27}$

B $\frac{2}{3}$

C $\frac{5}{9}$

D $\frac{2}{27}$

E $\frac{1}{3}$

10

Tom eats $\frac{1}{3}$ of a cake each day for 2 days.

How much of the cake has he eaten?

A $\frac{2}{6}$

B $\frac{1}{6}$

C $\frac{1}{9}$

D $\frac{2}{3}$

E 1

11

Work out this calculation. Give your answer in its simplest form.

$$6 \times \frac{3}{4} = \boxed{?}$$

A $4\frac{1}{2}$

B $\frac{18}{24}$

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

D $2\frac{1}{4}$

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

12

Work out this calculation.

$$\frac{1}{3} \times \frac{1}{2} = \boxed{?}$$

A $\frac{2}{5}$

B $\frac{1}{5}$

C $\frac{1}{6}$

D $\frac{2}{3}$

E $\frac{1}{9}$

13

Which calculation gives 1 whole?

A $2 \times \frac{1}{4}$

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

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

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

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

14

Work out this calculation.

$$4 \times \frac{2}{5} = \boxed{?}$$

A $\frac{8}{20}$

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

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

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

E $\frac{6}{20}$

15

A bottle holds $\frac{3}{4}$ of a litre of juice. Ella shares it equally between 3 glasses.

How much juice is in each glass?

A $\frac{3}{7}$ of a litre

B $\frac{1}{2}$ of a litre

C $\frac{3}{4}$ of a litre

D $\frac{1}{4}$ of a litre

E $\frac{1}{3}$ of a litre

16

Work out this calculation. Give your answer in its simplest form.

$$3 \times \frac{5}{6} = \boxed{?}$$

A $2\frac{1}{2}$

B $\frac{15}{18}$

C $2\frac{3}{4}$

D $1\frac{1}{2}$

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

Part 2: Write your answer

17

What is the missing number?

$$4 \times \frac{1}{9} = \frac{\boxed{?}}{9}$$

Write your answer in the boxes on the answer sheet, one digit in each box.

18

What is the missing number?

$$3 \times \frac{2}{7} = \frac{\boxed{?}}{7}$$

Write your answer in the boxes on the answer sheet, one digit in each box.

19

What whole number is the answer?

$$8 \times \frac{1}{4} = \boxed{?}$$

Write your answer in the boxes on the answer sheet, one digit in each box.

20

What is the missing number?

$$\frac{1}{2} \times \frac{1}{5} = \frac{1}{\boxed{?}}$$

Write your answer in the boxes on the answer sheet, one digit in each box.

Answer sheet

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Name

Draw a firm line through the box next to your answer, like the example.

Part 1: Multiple choice

Ex	A ☐	B ☒	C ☐	D ☐	E ☐
1	A ☐	B ☐	C ☐	D ☐	E ☐
2	A ☐	B ☐	C ☐	D ☐	E ☐
3	A ☐	B ☐	C ☐	D ☐	E ☐
4	A ☐	B ☐	C ☐	D ☐	E ☐
5	A ☐	B ☐	C ☐	D ☐	E ☐
6	A ☐	B ☐	C ☐	D ☐	E ☐
7	A ☐	B ☐	C ☐	D ☐	E ☐
8	A ☐	B ☐	C ☐	D ☐	E ☐
9	A ☐	B ☐	C ☐	D ☐	E ☐
10	A ☐	B ☐	C ☐	D ☐	E ☐
11	A ☐	B ☐	C ☐	D ☐	E ☐
12	A ☐	B ☐	C ☐	D ☐	E ☐
13	A ☐	B ☐	C ☐	D ☐	E ☐
14	A ☐	B ☐	C ☐	D ☐	E ☐
15	A ☐	B ☐	C ☐	D ☐	E ☐
16	A ☐	B ☐	C ☐	D ☐	E ☐

Part 2: Write your answer, one digit in each box

17	
18	
19	
20	

Answers

For a parent to mark with. One mark for each question: the paper is out of 20. Talk through any your child got wrong, using the explanation.

Q	Answer	How to get it
1	E $\frac{3}{7}$	Multiply the top by 3: $3 \times 1 = 3$. The bottom stays 7: $\frac{3}{7}$.
2	A $\frac{3}{4}$	$2 \times 3 = 6$, so $\frac{6}{8}$. Divide the top and bottom by 2: $\frac{3}{4}$.
3	C $3 \times \frac{2}{9}$	Adding $\frac{2}{9}$ three times is $3 \times \frac{2}{9}$, which is $\frac{6}{9}$.
4	B 1	$4 \times 1 = 4$, so $\frac{4}{4}$. Four quarters make 1 whole.
5	D $\frac{3}{4}$ of a litre	$3 \times \frac{1}{4} = \frac{3}{4}$ of a litre.
6	A $1 \frac{2}{3}$	$5 \times 1 = 5$, so $\frac{5}{3}$. That is more than 1 whole: $5 \div 3 = 1$ r 2, so $1 \frac{2}{3}$.
7	E $\frac{1}{8}$	"Of" means $\times$. $\frac{1}{2} \times \frac{1}{4}$: tops $1 \times 1 = 1$, bottoms $2 \times 4 = 8$. Half of a quarter is $\frac{1}{8}$.
8	C $\frac{1}{4}$	Sharing a half into 2 equal parts: multiply the bottom by 2. $\frac{1}{2} \div 2 = \frac{1}{4}$.
9	B $\frac{2}{3}$	$3 \times 2 = 6$, so $\frac{6}{9}$. Divide the top and bottom by 3: $\frac{2}{3}$.
10	D $\frac{2}{3}$	$2 \times \frac{1}{3} = \frac{2}{3}$ of the cake.
11	A $4 \frac{1}{2}$	$6 \times 3 = 18$, so $\frac{18}{4}$. $18 \div 4 = 4$ r 2, so $4 \frac{2}{4}$, which simplifies to $4 \frac{1}{2}$.
12	C $\frac{1}{6}$	Multiply the tops ($1 \times 1 = 1$) and the bottoms ($3 \times 2 = 6$): $\frac{1}{6}$.
13	E $4 \times \frac{1}{4}$	$4 \times \frac{1}{4} = \frac{4}{4} = 1$. The others make $\frac{2}{4}$, $\frac{3}{4}$, $\frac{2}{3}$ and $\frac{5}{6}$.
14	B $1 \frac{3}{5}$	$4 \times 2 = 8$, so $\frac{8}{5}$. $8 \div 5 = 1$ r 3, so $1 \frac{3}{5}$.
15	D $\frac{1}{4}$ of a litre	$\frac{3}{4} \div 3$: there are 3 quarters, so each glass gets 1 quarter, $\frac{1}{4}$ of a litre. (Or multiply the bottom: $\frac{3}{12} = \frac{1}{4}$.)
16	A $2 \frac{1}{2}$	$3 \times 5 = 15$, so $\frac{15}{6}$. $15 \div 6 = 2$ r 3, so $2 \frac{3}{6} = 2 \frac{1}{2}$.
17	4	Multiply the top: $4 \times 1 = 4$.
18	6	Multiply the top: $3 \times 2 = 6$.
19	2	$8 \times 1 = 8$, so $\frac{8}{4}$, and $8 \div 4 = 2$.
20	10	Multiply the bottoms: $2 \times 5 = 10$. Half of a fifth is $\frac{1}{10}$.

Score: out of 20