

8300

GCSE MATHEMATICS

Foundation and Higher tier – Questions by Topic

Number

Four operations with fractions (calculator)

v1.0

Name _____

Materials

For this paper you must have:

- Mathematical instruments
- You may use a calculator



Information

- The marks for questions are shown in brackets

Advice

- In all calculations, show clearly how you work out your answer

Questions 1 to 11 are **foundation** tier only

Q1.

Work out $\frac{1}{4}$ of 780

(Total 1 mark)

Q2.

Work out $\frac{3}{7} \times 2$
Circle your answer.

$$\frac{6}{14}$$

$$\frac{6}{7}$$

$$\frac{3}{14}$$

$$\frac{9}{49}$$

(Total 1 mark)

Q3.

In the grid, the **product** of each row, column and diagonal is 1

	$\frac{1}{4}$	
	4	$\frac{1}{8}$

Complete the grid.

(Total 2 marks)

Q4.

Write a fraction in the box to make the calculation correct.

$$\frac{1}{2} \times \boxed{} = \frac{1}{8}$$

(Total 1 mark)

Q5.

There are 1020 books in a box.

$\frac{2}{5}$ of the books are blue.
How many are blue?

(Total 2 marks)

Q6.

On your calculator, or otherwise, work out
Give your answer as a mixed number.

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

(Total 2 marks)

Q7.

- (a) Work out $\frac{2}{7} \times 3$ (1)
- (b) Work out $\sqrt{529}$ (1)
- (c) Work out 3^4 (1)
- (Total 3 marks)**

Q8.

Work out $5\frac{1}{4} + \frac{1}{2} \times \frac{2}{3}$
Give your answer as a mixed number. (Total 2 marks)

Q9.

- (a) Work out 11% of 1400 (2)
- (b) Work out $\frac{4}{5}$ of 295 (2)
- (Total 4 marks)**

Q10.

Work out $\frac{3}{5}$ of 900 (Total 2 marks)

Q11.

Work out which distance is longer,
20% of 320 miles or $\frac{1}{2}$ of 130 miles.
You **must** show your working. (Total 4 marks)

Question 12 is **higher** tier only

Q12.

In a kettle, there are $1\frac{3}{5}$ litres of water.
A cup holds $\frac{1}{5}$ of a litre of water.
How many cups can be filled with the water in the kettle? (Total 2 marks)