

8300

GCSE MATHEMATICS

Foundation and Higher tier – Questions by Topic

Number

Four operations with mixed numbers

v1.0

Name _____

Materials

For this paper you must have:

- Mathematical instruments

Information

- The marks for questions are shown in brackets

Advice

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

Questions 1 to 8 are **foundation** tier only

For questions 1 to 4 you must **NOT** use a calculator.



Q1.

Work out $1\frac{1}{5} - \frac{3}{10}$
Give your answer as a fraction.

(Total 2 marks)

Q2.

Work out $\frac{5}{8} + \frac{13}{16}$
Give your answer as a mixed number.

(Total 3 marks)

Q3.

Work out $2\frac{1}{3} \div \frac{4}{5}$
Give your answer as a mixed number.

(Total 4 marks)

Q4.

Work out $8\frac{1}{2} \div 2\frac{2}{3}$
Give your answer as a mixed number.

(Total 4 marks)

For questions 5 to 8 you may use a calculator.



Q5.

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)

Q6.

Work out
Give your answer as a mixed number.

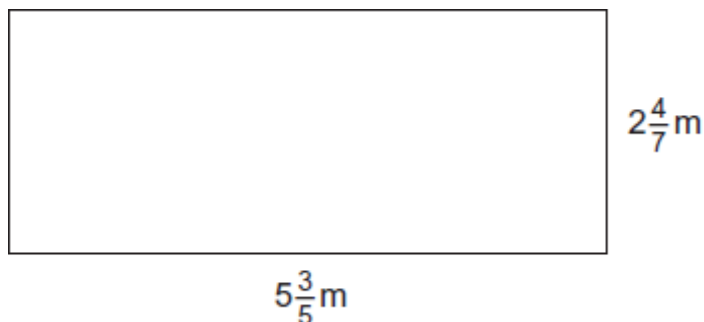
$$5\frac{1}{4} + \frac{1}{2} \times \frac{2}{3}$$

(Total 2 marks)

Q7.

Use a calculator to work out the area of the rectangle.

Not drawn
accurately



Give your answer as a mixed fraction.

(Total 2 marks)

Q8.

Joe, Kim and Lisa each have an amount of money.

Joe has £72

Joe's amount : Kim's amount = 6 : 5

Lisa's amount is $1\frac{1}{2}$ times Joe's amount.

Show that, in total, they have **less** than £250

(Total 3 marks)

Questions 9 to 14 are **higher** tier only

For questions 9 to 14 you must **NOT** use a calculator.



Q9.

Work out the value of
Circle your answer.

$$\left(1\frac{2}{3}\right)^2$$

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

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

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

$$2\frac{7}{9}$$

(Total 1 mark)

Q10.

Work out $2\frac{1}{8} - \frac{2}{3}$

(Total 3 marks)

Q11.

One lap of a racing circuit is $3\frac{3}{4}$ km
Work out the total distance for $4\frac{1}{2}$ laps.

(Total 3 marks)

Q12.

A motor racing circuit has length $5\frac{5}{6}$ miles.
A straight section of the circuit has length $1\frac{3}{4}$ miles.
What fraction of the circuit is the straight section?
Give your answer in its simplest form.

(Total 3 marks)

Q13.

Work out $2\frac{3}{4} \times 1\frac{7}{9}$
Give your answer as a mixed number.

(Total 3 marks)

Q14.

A piece of wood is $4\frac{1}{8}$ feet long.
Peter cuts a length of $1\frac{5}{6}$ feet off this piece of wood.
What fraction of the length of wood has Peter cut off?
Give your answer in its simplest form.

(Total 3 marks)