

Fractions

Question Paper

Course	Edexcel IGCSE Maths
Section	1. Numbers & the Number System
Topic	Fractions
Difficulty	Medium

Time allowed: 80
Score: /66
Percentage: /100

Question 1a

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

[3 marks]

Question 1b

Show that $2\frac{7}{15} - 1\frac{2}{3} = \frac{4}{5}$

[3 marks]

Question 2a

Show that $2\frac{1}{7} + 1\frac{1}{4} = 3\frac{11}{28}$

[2 marks]

Question 2b

Show that $1\frac{1}{5} \div \frac{3}{4} = 1\frac{3}{5}$

[2 marks]

Question 3

Show that $3\frac{1}{2} \times 1\frac{3}{5} = 5\frac{3}{5}$

[3 marks]

Question 4

Show that $6\frac{3}{4} \div 2\frac{4}{7} = 2\frac{5}{8}$

[3 marks]

Question 5

Show that $3\frac{1}{5} \times 1\frac{5}{6} = 5\frac{13}{15}$

[3 marks]

Question 6

Show that $2\frac{4}{7} \div 1\frac{1}{8} = 2\frac{2}{7}$

[3 marks]

Question 7

Show that $4\frac{2}{3} + 3\frac{4}{5} = 8\frac{7}{15}$

[3 marks]

Question 8

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

[3 marks]

Question 9

Show that $4\frac{2}{3} \div 1\frac{1}{9} = 4\frac{1}{5}$

[3 marks]

Question 10

Show that $3\frac{4}{7} - 1\frac{5}{8} = 1\frac{53}{56}$

[3 marks]

Question 11

Circle the number half way between $\frac{7}{12}$ and $\frac{3}{4}$

$$\frac{7}{32}$$

$$\frac{5}{8}$$

$$\frac{2}{3}$$

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

[1 mark]

Question 12

In a school, $\frac{2}{3}$ of the students study a language.

Of those students who study a language, $\frac{2}{5}$ study Spanish.

Find the ratio of students who study Spanish to students who do not study Spanish.

[3 marks]

Question 13

A unit fraction has a numerator equal to 1, for example $\frac{1}{3}$, $\frac{1}{7}$ and $\frac{1}{25}$.

Unit fractions can be written as the sum of two different unit fractions, for example

$$\frac{1}{2} = \frac{1}{3} + \frac{1}{6}$$

Write each of the following unit fractions as the sum of two **different** unit fractions.

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

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

$$\frac{1}{6} = \frac{1}{\square} + \frac{1}{\square}$$

[3 marks]

Question 14

Without using a calculator, work out $\frac{15}{28} \div \frac{4}{7}$.

You must show all your working and give your answer as a fraction in its simplest form.

[3 marks]

Question 15

Without using a calculator, work out $\frac{2}{3} + \frac{1}{4} \times \frac{2}{3}$.

Write down all the steps of your working and give your answer as a fraction in its simplest form.

[4 marks]

Question 16

Without using a calculator, work out $\frac{5}{6} + \frac{2}{3}$.

You must show all your working and give your answer as a mixed number in its simplest form.

[3 marks]

Question 17

Giulio's reaction times are measured in two games.

In the first game his reaction time is $\frac{1}{3}$ of a second.

In the second game his reaction time is $\frac{1}{8}$ of a second.

Find the difference between the two reaction times.

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[1 mark]

Question 18

Without using a calculator, work out $\frac{12}{35} \times \frac{7}{9}$.

You must show all your working and give your answer as a fraction in its simplest form.

[2 marks]

Question 19

Without using a calculator, work out $\frac{1}{15} + \frac{2}{5}$.

Write down all the steps of your working and give your answer as a fraction in its simplest form.

[2 marks]

Question 20

Without using a calculator, work out $\frac{1}{4} \div \frac{2}{3}$.

You must show all your working and give your answer as a fraction.

[2 marks]

Question 21

Collette has \$136 and spends half of her money on clothes and $\frac{1}{5}$ of her money on books.

Calculate the amount she has left.

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[3 marks]

Question 22

Without using your calculator, work out $\frac{2}{3} - \frac{1}{12}$.

You must show all your working and give your answer as a fraction in its simplest form.

[2 marks]

Question 23

Without using your calculator, work out $\frac{7}{8} + \frac{1}{6}$.

You must show all your working and give your answer as a mixed number in its simplest form.

[3 marks]