

Fractions

Question Paper

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

Time allowed: 80
Score: /65
Percentage: /100

Question 1a

Show that $2\frac{1}{4} \times 3\frac{1}{3} = 7\frac{1}{2}$

[3 marks]

Question 1b

Write the numbers 3, 4, 5 and 6 in the boxes to give the greatest possible total.

You may write each number only once.

$$\begin{array}{|c|} \hline \\ \hline \end{array} \frac{1}{\begin{array}{|c|} \hline \\ \hline \end{array}} + \begin{array}{|c|} \hline \\ \hline \end{array} \frac{2}{\begin{array}{|c|} \hline \\ \hline \end{array}}$$

[1 mark]

Question 2

Show that $1\frac{2}{3} + 2\frac{3}{4} = 4\frac{5}{12}$

[3 marks]

Question 3

There are 60 children in a club.

In the club, the ratio of the number of girls to the number of boys is 3:1

$\frac{3}{5}$ of the girls play a musical instrument.

$\frac{4}{5}$ of the boys play a musical instrument.

What fraction of the 60 children play a musical instrument?

[4 marks]

Question 4

Show that $5\frac{2}{3} - 2\frac{3}{4} = 2\frac{11}{12}$

[3 marks]

Question 5

Each month Edna spends all her income on rent, on travel and on other living expenses.

She spends $\frac{1}{3}$ of her income on rent.

She spends $\frac{1}{5}$ of her income on travel.

She spends \$420 of her income on other living expenses.

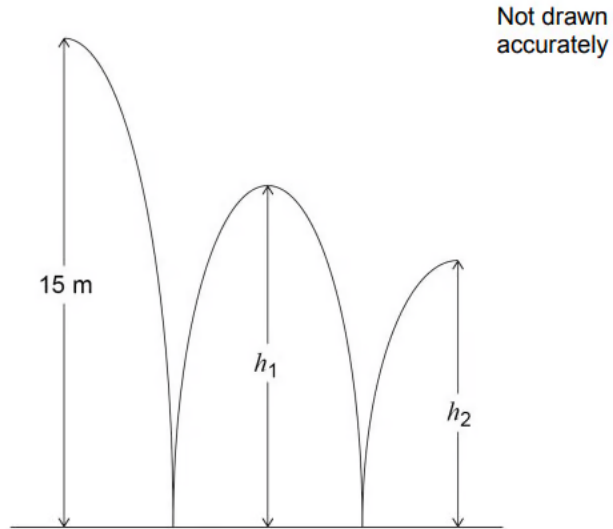
Work out her income each month.

[4 marks]

Question 6a

A ball is thrown from a height of 15 metres.

It bounces to height h_1 , then to height h_2 as shown.



h_1 is three quarters of the original height.

Jack expects h_2 to be three quarters of h_1

Work out the value of h_2 that he expects.

.....metres

[2 marks]

Question 6b

In fact, h_2 is two thirds of h_1

How does this affect the answer to part (a)?

Tick a box.

The ball bounced higher than he expected

The ball bounced lower than he expected

Show working to support your answer.

[2 marks]

Question 7

Without using a calculator, work out $\frac{5}{6} \div 1\frac{1}{3}$.

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

[3 marks]

Question 8

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

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

[3 marks]

Question 9

Without using a calculator, work out $1\frac{1}{7} \times 2\frac{1}{10}$.

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

[3 marks]

Question 10

Without using a calculator, work out $\left(2\frac{1}{3} - \frac{7}{8}\right) \times \frac{6}{25}$.

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

[4 marks]

Question 11

Without using a calculator, work out $1\frac{3}{4} - \frac{11}{12}$.

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

[3 marks]

Question 12

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

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

[3 marks]

Question 13

Without using your calculator, work out $1\frac{7}{12} + \frac{13}{20}$.

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

[3 marks]

Question 14

Without using a calculator, work out $\frac{5}{16} \times 1\frac{1}{7}$.

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

[2 marks]

Question 15

Without using a calculator, work out $3\frac{5}{8} - 1\frac{2}{3}$.

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

[3 marks]

Question 16

Without using a calculator, work out $2\frac{1}{4} \div \frac{3}{7}$.

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

[3 marks]

Question 17

Without using a calculator, work out $3\frac{1}{8} \div \frac{5}{12}$.

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

[4 marks]

Question 18

Without using your calculator, work out $\frac{3}{8} \div 2\frac{1}{4}$.

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

[3 marks]

Question 19

Without using your calculator, work out $1\frac{3}{4} \times \frac{6}{35}$.

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

[3 marks]

Question 20

Without using a calculator, work out $\frac{2}{3} \div 1\frac{1}{5}$.

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

[3 marks]

