Fractions, Decimals & Percentages

Question Paper

Course	Edexcel IGCSE Maths
Section	1. Numbers & the Number System
Topic	Fractions, Decimals & Percentages
Difficulty	Easy

Time allowed: 40

Score: /32

Percentage: /100

Question 1

Mr Mason asks 240 Year 11 students what they want to do next year.

15% of the students want to go to college.

$\dfrac{3}{4}$ of the students want to stay at school.

The rest of the students do not know.

Work out the number of students who do not know.

[4 marks]

Question 2

Sasha takes a music exam.

The table shows the result that Sasha can get for different percentages in her music exam.

Percentage	Result
50% – 69%	Pass
70% – 84%	Merit
85% – 100%	Distinction

Sasha gets 62 out of 80 in her music exam.

What result does Sasha get?

You must show your working.

[2 marks]

Question 3

Karen got 32 out of 80 in a maths test.
She got 38% in an English test.

Karen wants to know if she got a higher percentage in maths or in English.
Did Karen get a higher percentage in maths or in English?

[2 marks]

Question 4

Celina and Zoe both sing in a band.

One evening the band plays for 80 minutes.
Celina sings for 65% of the 80 minutes.

Zoe sings for $\dfrac{5}{8}$ of the 80 minutes.

Celina sings for more minutes than Zoe sings.

Work out for how many more minutes.
You must show all your working.

[4 marks]

Question 5

Prove algebraically that the recurring decimal $0.2\dot{5}$ has the value $\dfrac{23}{90}$

[2 marks]

Question 6

Show that the recurring decimal $0.1\dot{7} = \dfrac{8}{45}$

[2 marks]

Question 7

Use algebra to show that the recurring decimal $0.3\dot{8} = \dfrac{7}{18}$

[2 marks]

Question 8

Use algebra to show that the recurring decimal $0.2\dot{6} = \dfrac{4}{15}$

[2 marks]

Question 9

Use algebra to show that $4.\dot{5}\dot{7} = 4\frac{19}{33}$

[2 marks]

Question 10

120 children go on an activity holiday.
The ratio of the number of girls to the number of boys is $3:5$.

On Sunday, all the children either go sailing or go climbing.
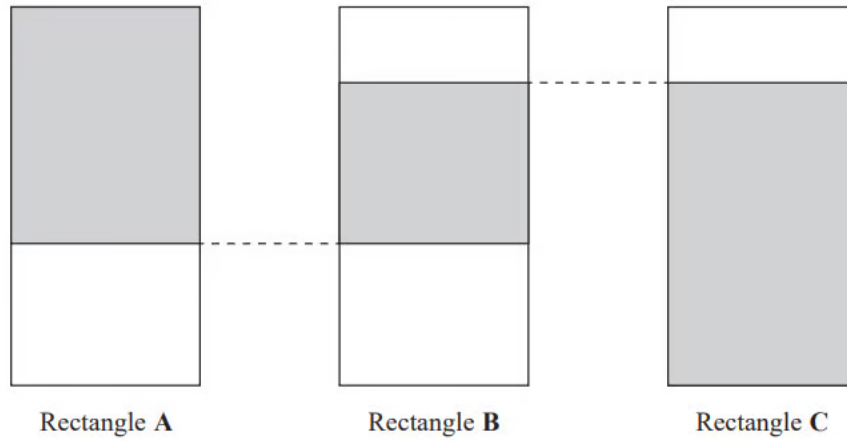$\dfrac{16}{25}$ of the boys go climbing.

Twice as many girls go sailing as go climbing.

Work out how many children go sailing on Sunday.

[6 marks]

Question 11

The diagram shows three identical rectangles.

Rectangle A   Rectangle B   Rectangle C

$\dfrac{5}{8}$ of rectangle **A** is shaded.

80% of rectangle **C** is shaded.

What fraction of rectangle **B** is shaded?

[3 marks]

Question 12

Circle the largest number.

$0.\dot{5}$ 0.55 0.545 $0.5\dot{4}\dot{5}$

[1 mark]