Edexcel GCSE

Mathematics (Linear) – 1MA0

RECURRING DECIMALS INTO **FRACTIONS**

Materials required for examination Ruler graduated in centimetres and millimetres, protractor, compasses,

pen, HB pencil, eraser.

Tracing paper may be used.

Instructions

Use black ink or ball-point pen.

Fill in the boxes at the top of this page with your name, centre number and candidate number. Answer all questions.

Items included with question papers

Answer the questions in the spaces provided – there may be more space than you need. Calculators may be used.

Information

The marks for each question are shown in brackets – use this as a guide as to how much time to spend on each question.

Questions labelled with an **asterisk** (*) are ones where the quality of your written communication will be assessed – you should take particular care on these questions with your spelling, punctuation and grammar, as well as the clarity of expression.

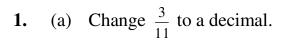
Advice

Read each question carefully before you start to answer it.

Keep an eye on the time.

Try to answer every question.

Check your answers if you have time at the end.



.....(1)

(b) Prove that the recurring decimal $0.39 = \frac{13}{33}$

(3) (Total 4 marks)

2. Prove that the recurring decimal $0.\dot{4}\dot{5} = \frac{15}{33}$

3.	Express the recurring decimal 0.213 as a fraction.	
		(Total 3 marks)
4.	Prove that 0.473 can be written as the fraction $\frac{469}{990}$,
	990	

(Total 2 marks)

5.	Prove that the recurring decimal	0.17 =	17 99
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(Total 2 marks)

6. (a) Express $0.\dot{2}\dot{7}$ as a fraction in its simplest form.

x is an integer such that $1 \le x \le 9$

(b) Prove that $0.\dot{0}\dot{x} = \frac{x}{99}$

- (2) (Total 5 marks)
- 7. Change the recurring decimal $0.\dot{2}\dot{3}$ to a fraction.

(Total 2 marks)

8.	(i)	Convert the recurring decimal 0.36 to a fraction.
	(ii)	Convert the recurring decimal $2.1\dot{3}\dot{6}$ to a mixed number. Give your answer in its simplest form.
		Give your answer in its simplest form.
		(Tatal 5 alla)
		(Total 5 marks)
9.	Con	vert the recurring decimal 2.145 to a fraction.
		(Total 3 marks)

10.	Express the recurring decimal 0.126 as a fraction	n.
		(Total 3 marks)
11.	Express 0.3 28 as a fraction in its simplest form.	
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12	The recurring decimal $0.\dot{7}\dot{2}$ can be written as the fraction	11
	Write the recurring decimal $0.5\dot{7}\dot{2}$ as a fraction.	
		(Total 2 marks)
13	Express the recurring decimal 2.06 as a fraction. Write your answer in its simplest form.	