



# EXAM PAPERS PRACTICE

## GCSE Edexcel Math 1MA1 Recurring Decimals Question Paper

*"We will help you to  
achieve A Star "*



**Question 1**

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

[2 marks]

**Question 2**

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

[2 marks]

**Question 3**

Write the recurring decimal  $0.2\dot{5}$  as a fraction.  
[ $0.2\dot{5}$  means  $0.2555\dots$ ]

[2 marks]



**Question 4**

Write the recurring decimal  $0.\dot{3}6$  as a fraction.  
Give your answer in its simplest form.  
[ $0.\dot{3}6$  means  $0.3666\dots$ ]

[3 marks]

**Question 5**

Write the recurring decimal  $0.\dot{4}$  as a fraction.  
[ $0.\dot{4}$  means  $0.444\dots$ ]

[2 marks]



**Question 6**

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

[2 marks]

**Question 7**

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

[2 marks]

**Question 8**

Write the recurring decimal  $0.\dot{2}$  as a fraction.  
[ $0.\dot{2}$  means  $0.222\dots$ ]

[2 marks]

**Question 9**

Write the recurring decimal  $0.3\dot{2}$  as a fraction.  
[ $0.3\dot{2}$  means  $0.3222\dots$ ]

[2 marks]



**Question 10**

Write these numbers in order of size.  
Start with the smallest number.

$$0.2\dot{4}\dot{6}$$

$$0.24\dot{6}$$

$$0.\dot{2}4\dot{6}$$

$$0.246$$

[2 marks]

**Question 11**

Show that the recurring decimal  $0.\dot{3}9\dot{6} = \frac{44}{111}$

[2 marks]

**Question 12**

Write the recurring decimal  $0.\dot{6}\dot{3}$  as a fraction in its lowest terms.  
You must show all your working.

[3 marks]



**Question 13**

Write the recurring decimal  $0.4\ddot{8}$  as a fraction.  
Show all your working.

[2 marks]

**Question 14**

Express the recurring decimal  $0.2\dot{8}\dot{1}$  as a fraction in its simplest form.

[3 marks]

**Question 15**

Using algebra, prove that  $0.1\dot{3}\dot{6} \times 0.\dot{2}$  is equal in value to  $\frac{1}{33}$

[3 marks]