

GCSE QUESTIONS

Q1. NON-CALCULATOR

Prove that the recurring decimal $0.4\dot{3}$ has the value $\frac{13}{30}$

(Total for question = 2 marks)

Q2. NON-CALCULATOR

Express $0.4\dot{1}\dot{8}$ as a fraction. You must show all your working.

.....
(Total for question = 3 marks)

Q3. NON-CALCULATOR

Prove algebraically that $0.2\dot{5}\dot{6}$ can be written as $\frac{127}{495}$

(Total for question = 3 marks)

Q4. NON-CALCULATOR

$$x = 0.4\dot{3}\dot{6}$$

$$\frac{24}{55}$$

Prove algebraically that x can be written as

(Total for question = 3 marks)

Q5. NON-CALCULATOR

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

.....
(Total for Question is 3 marks)

Q6. NON-CALCULATOR

Write $0.6\dot{2}\dot{4}$ as a fraction in its simplest form.

.....
(Total for question = 3 marks)

Q7. NON-CALCULATOR

Express the recurring decimal $0.7\dot{5}\dot{0}$ as a fraction.

.....
(Total for Question is 3 marks)

Q8. CALCULATOR ALLOWED

Prove algebraically that the recurring decimal $0.3\dot{1}\dot{8}$ can be written as $\frac{7}{22}$

(Total for question = 2 marks)

Q9. CALCULATOR ALLOWED

Prove algebraically that the recurring decimal $0.4\dot{5}\dot{7}$ can be written as $\frac{151}{330}$

(Total for question = 3 marks)

Q10. CALCULATOR ALLOWED

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

(Total for question = 3 marks)