Questions

Q1.

Prove algebraically that the recurring decimal $0.1\dot{7}\dot{8}$ can be written as the fraction $\frac{59}{330}$

(Total for question = 3 marks)

Q2.

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

(Total for question = 2 marks)

Q3.

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

(Total for question = 2 marks)

Q4.

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

. . . . . .

(Total for Question is 3 marks)

Q5.

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

(Total for question = 2 marks)

Q6.

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

.....

(Total for question = 3 marks)

Q7.

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

Prove algebraically that x can be written as $\frac{24}{55}$

(Total for question = 3 marks)

Q8.

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)

Q9.

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

. . . . . .

(Total for Question is 3 marks)

Q10.

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

$0.24\dot{6}\dot{6}$ $0.24\dot{6}$ $0.\dot{2}4\dot{6}$ 0.246

.....