GCSE HIGHER · REVISION MAT 4

Recurring decimals

1 Write $\frac{1}{9}$ as a recurring decimal.

2 Write $0.\dot{2}\dot{4}$ as a fraction in its simplest form.

3 Explain how you know that $\frac{5}{12}$ is a recurring decimal.

4 Write $0.\dot{8}\dot{1}$ as a fraction in its simplest form.

5 Prove that $0.\dot{6}\dot{3} = \frac{7}{11}$.

6 Write $0.5\dot{8}$ as a fraction.

7 Show that $0.1\dot{5} = \frac{7}{45}$.

8 Work out as a fraction.

$0.\dot{3} \times 0.\dot{6}$

Mr&Mrs MATHS

ANSWERS · REVISION MAT 4

Recurring decimals

1 $0.\dot{1}$

2 $\frac{24}{99}$

$\frac{8}{33}$

3 12 = 2 × 2 × 3: the factor 3 makes it recur.

4 $\frac{81}{99}$

$\frac{9}{11}$

5 $100x - x = 63$

$x = \frac{63}{99}$

$= \frac{7}{11}$

6 $100x - 10x = 53$

$\frac{53}{90}$

7 $100x - 10x = 14$

$x = \frac{14}{90}$

$= \frac{7}{45}$

8 $\frac{1}{3} \times \frac{2}{3}$

$\frac{2}{9}$

Mr&Mrs MATHS