GCSE HIGHER · REVISION MAT 5

Recurring decimals

1 Write $0.\dot{5}$ as a fraction.

2 Write $\frac{4}{11}$ as a recurring decimal.

3 Show that $\frac{9}{40}$ is a terminating decimal and write it as a decimal.

4 Write $0.\dot{3}\dot{9}$ as a fraction in its simplest form.

5 Prove that $0.\dot{4}\dot{2} = \frac{14}{33}$.

6 Write $0.0\dot{7}$ as a fraction.

7 Show that $2.\dot{1} = \frac{19}{9}$.

8 Work out as a fraction.

$$0.\dot{2}\dot{7} - 0.\dot{1}$$

Mr&Mrs MATHS

ANSWERS · REVISION MAT 5

Recurring decimals

1 $\frac{5}{9}$

2 $0.\dot{3}\dot{6}$

3 $40 = 2^3 \times 5$

0.225

4 $\frac{39}{99}$

$\frac{13}{33}$

5 $100x - x = 42$

$x = \frac{42}{99}$

$= \frac{14}{33}$

6 $100x - 10x = 7$

$\frac{7}{90}$

7 $10x - x = 21.1... - 2.1... = 19$

$x = \frac{19}{9}$

8 $\frac{27}{99} - \frac{11}{99}$

$\frac{16}{99}$

Mr&Mrs MATHS