GCSE HIGHER · REVISION MAT 2

Recurring decimals

1 Write $\frac{2}{9}$ as a recurring decimal.

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

3 Which of $\frac{1}{3}$, $\frac{1}{4}$, $\frac{1}{5}$, $\frac{1}{6}$ are recurring decimals?

Explain.

4 Write $0.\dot{5}\dot{4}$ as a fraction in its simplest form.

5 Prove that $0.\dot{3}\dot{6} = \frac{4}{11}$.

6 Write $0.8\dot{3}$ as a fraction in its simplest form.

7 Show that $0.\dot{1}2\dot{3} = \frac{41}{333}$.

8 Work out as a fraction.

$0.\dot{4} + 0.\dot{1}\dot{5}$

Mr&Mrs MATHS

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Recurring decimals

1 $0.\dot{2}$

2 $\frac{18}{99}$

$\frac{2}{11}$

3 $\frac{1}{3}$ and $\frac{1}{6}$: their denominators have a prime factor of 3.

4 $\frac{54}{99}$

$\frac{6}{11}$

5 $100x - x = 36$

$x = \frac{36}{99}$

$= \frac{4}{11}$

6 $100x - 10x = 75$

$x = \frac{75}{90}$

$\frac{5}{6}$

7 $1000x - x = 123$

$x = \frac{123}{999}$

$= \frac{41}{333}$

8 $\frac{4}{9} + \frac{15}{99}$

$\frac{44}{99} + \frac{15}{99}$

$\frac{59}{99}$

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