Name: Class: Mark:

1. Complete this table. Write the fractions in their simplest form.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Fraction** | $$\frac{1}{4}$$ |  |  | $$\frac{5}{8}$$ |  |  |
| **Decimal** |  |  | 0.6 |  | 0.$\dot{6}$ |  |
| **Percentage** |  | 80% |  |  |  | 120% |

2.

a) Which of these fractions are equal to terminating decimals?

 $\frac{1}{3}$ $\frac{1}{4}$ $\frac{1}{5}$ $ \frac{1}{6}$ $\frac{1}{7}$ $\frac{1}{8}$

b) State the terminating decimals.

3. Show by using division that $\frac{3}{4}$ = 0.75

4.

a) Which of these fractions are equal to recurring decimals?

 Use a calculator to help.

 $\frac{2}{10}$ $\frac{3}{11}$ $\frac{4}{12}$ $\frac{5}{13}$ $\frac{6}{14}$ $\frac{7}{15}$ $\frac{8}{16}$

b) Use a calculator to find the recurring decimals.

5. State the value of the digit in the 4th decimal place for each of these numbers.

a) 0. $\dot{6}$ b) 0.3$\dot{8}$ c) 0. $\dot{4}\dot{5}$

6. Write each of these recurring decimals using the dot notation.

a) 0.7777… b) 0.141414…

c) 0.890189… d) 0.2555…

7. Use division to find the decimal equivalent to $\frac{5}{7}$

 Show your working.
Give your answer using the dot notation.

8. Use your calculator to find the decimal equivalents of $\frac{1}{14}$ , $\frac{2}{14}$ and $\frac{3}{14}$

 What do you notice about the digits in each of the decimals?

 Find the decimal equivalents for $\frac{4}{14}$ , $\frac{5}{14}$ and $\frac{6}{14}$

 Use any patterns you find to predict other decimals equivalents in the family of fractions with a denominator of 14.

 Check your predictions with a calculator.