# Fractions to decimals (2)

**1** Fractions can be expressed as divisions.

For example, $\frac{1}{2} = 1 \div 2$

Write the fractions as divisions.

**a)** $\frac{1}{3} = \square \div \square$

**b)** $\frac{2}{3} = \square \div \square$

**c)** $\frac{4}{7} = \square \div \square$

**d)** $\frac{\square}{\square} = 3 \div 5$

**e)** $\frac{\square}{7} = 3 \div \square$

**f)** $\frac{1}{10} = \square \div \square$

**2** Use place value counters to find the decimal equivalent of $\frac{2}{5}$

You can draw on the place value chart to help you with exchanging.

$\frac{2}{5} = 2 \div 5 = \square$

| Ones | Tenths |
|---|---|
| 1 1 | |

**3** Fractions can be converted to decimals by using the short division method.

For example, $\frac{1}{8} = 1 \div 8$

$$\begin{array}{r} 0.125 \\ 8\overline{)1.^{1}0^{2}0^{4}0} \end{array}$$

$\frac{1}{8} = 0.125$

Use the short division method to find the decimal equivalent of the fractions.

**a)**

$$\begin{array}{r} . \\ 4\overline{)1.0\,0} \end{array}$$

$\frac{1}{4} = \square$

**b)**

$$\begin{array}{r} . \\ 5\overline{)4.0} \end{array}$$

$\frac{4}{5} = \square$

**c)**

$$\begin{array}{r} . \\ 8\overline{)3.0} \end{array}$$

$\frac{3}{8} = \square$

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**4** Find the decimal equivalents for these fractions.

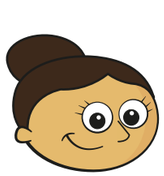
**a)** $\frac{7}{8}$ = ☐

**c)** $\frac{1}{16}$ = ☐

**b)** $\frac{7}{5}$ = ☐

**d)** $\frac{9}{16}$ = ☐

**5**



To find $\frac{19}{20}$ as a decimal, I found $\frac{1}{20}$ as a decimal, then took it away from 1

Here is Dora's working out.

| | | | | | | |
|---|---|---|---|---|---|---|
| | | | | | | |
| | | | 0 • 0 | 5 | | |
| | 2 | 0 | 1 • $^{1}0$ | $^{10}0$ | | |
| | | | | | | |

1 – 0.05 = 0.95

$\frac{19}{20}$ = 0.95

Use Dora's method to find the decimal equivalent for $\frac{49}{50}$

☐

**6**



I converted $\frac{1}{2}$ to a decimal and got the answer 2

Jack is incorrect.

Explain the mistake that Jack has made.

**7** Filip is thinking of a fraction.

When he converts it to a decimal, it is smaller than 0.5 but greater than 0.4

What fraction could Filip be thinking of?

☐

Are there any other possible answers? Talk to a partner.

**8** Use the short division method to find the decimal equivalent of $\frac{1}{3}$

Compare answers with a partner.

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