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)

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

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

4 Find the decimal equivalents for these fractions.

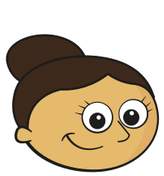
a) $\frac{7}{8}$ = ☐

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?

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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.