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) $\frac{1}{3} = \boxed{1} \div \boxed{3}$

b) $\frac{2}{3} = \boxed{2} \div \boxed{3}$

c) $\frac{4}{7} = \boxed{4} \div \boxed{7}$

d) $\frac{\boxed{3}}{\boxed{5}} = 3 \div 5$

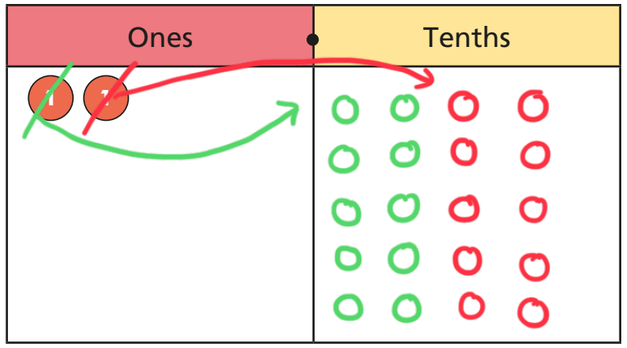
e) $\frac{\boxed{3}}{7} = 3 \div \boxed{7}$

f) $\frac{1}{10} = \boxed{1} \div \boxed{10}$

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

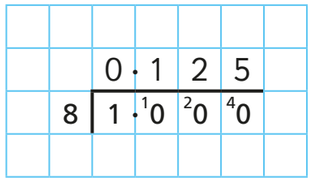
You can draw on the place value chart to help you with exchanging.

$\frac{2}{5} = 2 \div 5 = \boxed{0.4}$



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

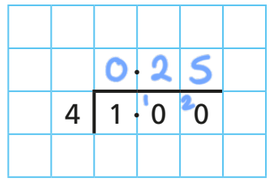
For example, $\frac{1}{8} = 1 \div 8$



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

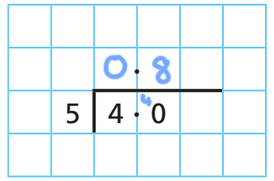
Use the short division method to find the decimal equivalent of the fractions.

a)



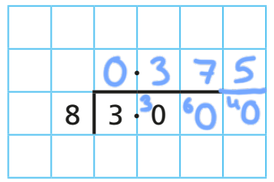
$\frac{1}{4} = \boxed{0.25}$

b)



$\frac{4}{5} = \boxed{0.8}$

c)



$\frac{3}{8} = \boxed{0.375}$

4 Find the decimal equivalents for these fractions.

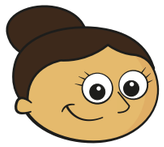
a) $\frac{7}{8}$ = 0·875

c) $\frac{1}{16}$ = 0·0625

b) $\frac{7}{5}$ = 1·4

d) $\frac{9}{16}$ = 0·5625

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 $\frac{49}{50}$

			0·0	2		
	5	0	1·^{1}0	^{10}0		

1 – 0·02 = 0·98

0·98

6

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

Jack is incorrect.

Explain the mistake that Jack has made.

He did 2 ÷ 1 when he should have done 1 ÷ 2

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.

E.g $\frac{9}{20}$

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

0·33333...

Compare answers with a partner.