1 x 12 = 12

2 x 12 = 24

3 x 12 = 36

4 x 12 = 48

5 x 12 = 60

6 x 12 = 72

7 x 12 = 84

8 x 12 = 96

9 x 12 = 108

10 x 12 = 120

11 x 12 = 132

12 x 12 = 144

$12 \div 12 = 1$

$24 \div 12 = 2$

$36 \div 12 = 3$

$48 \div 12 = 4$

$60 \div 12 = 5$

$72 \div 12 = 6$

$84 \div 12 = 7$

$96 \div 12 = 8$

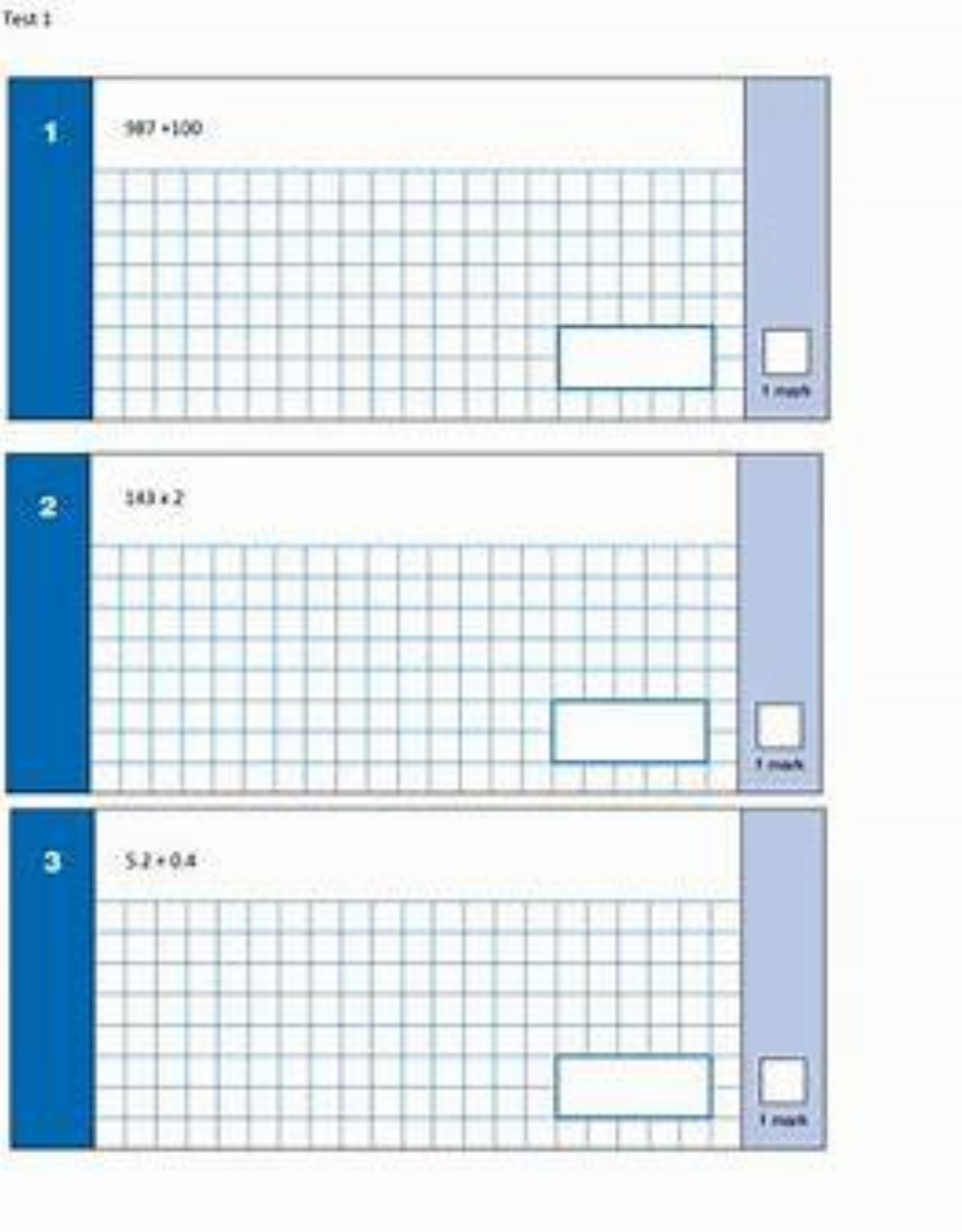
$108 \div 12 = 9$

$120 \div 12 = 10$

$132 \div 12 = 11$

$144 \div 12 = 12$

Arithmetic Test



14.01.2021

L.O: To convert fractions into decimals using division.

Success Criteria;

- Use your knowledge of place value
- Use your knowledge of equivalent
- fractions
- Use the formal written method for
- division

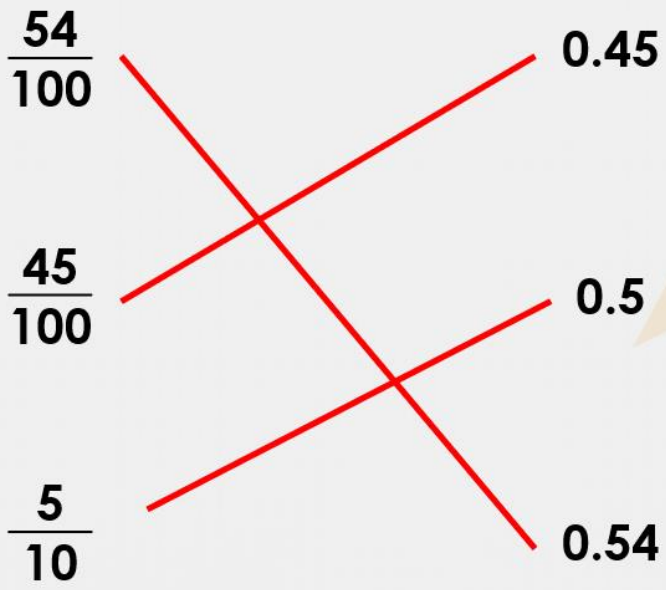
Introduction

Match each fraction to the correct equivalent decimal.

$\frac{54}{100}$	0.45
$\frac{45}{100}$	0.5
$\frac{5}{10}$	0.54

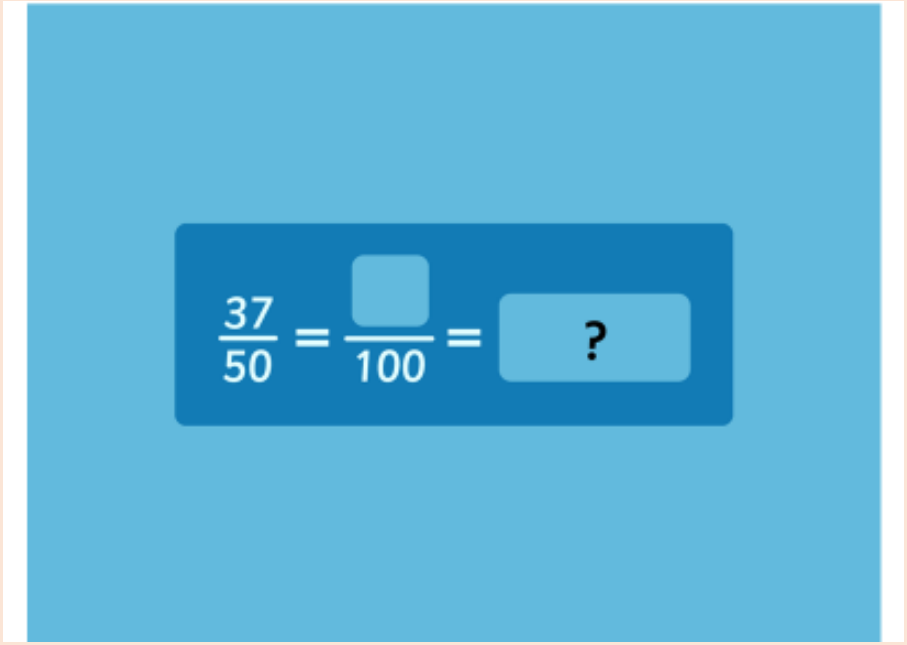
Introduction

Match each fraction to the correct equivalent decimal.



Converting fractions using knowledge of equivalent fractions

To convert some fractions into decimal numbers, you need to convert them into an equivalent fraction.

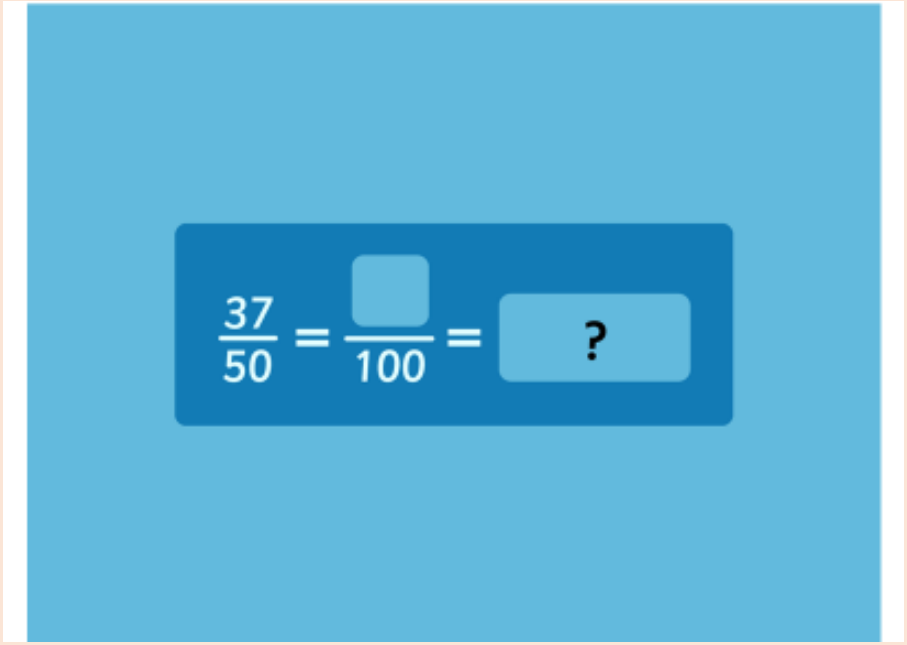


$\frac{37}{50}$ needs to be converted into a fraction with the denominator hundredths, in order to identify it's decimal equivalent.

You need to use your knowledge of multiplication to find it's equivalent fraction in hundredths.

Converting fractions using knowledge of equivalent fractions

To convert some fractions into decimal numbers, you need to convert them into an equivalent fraction.



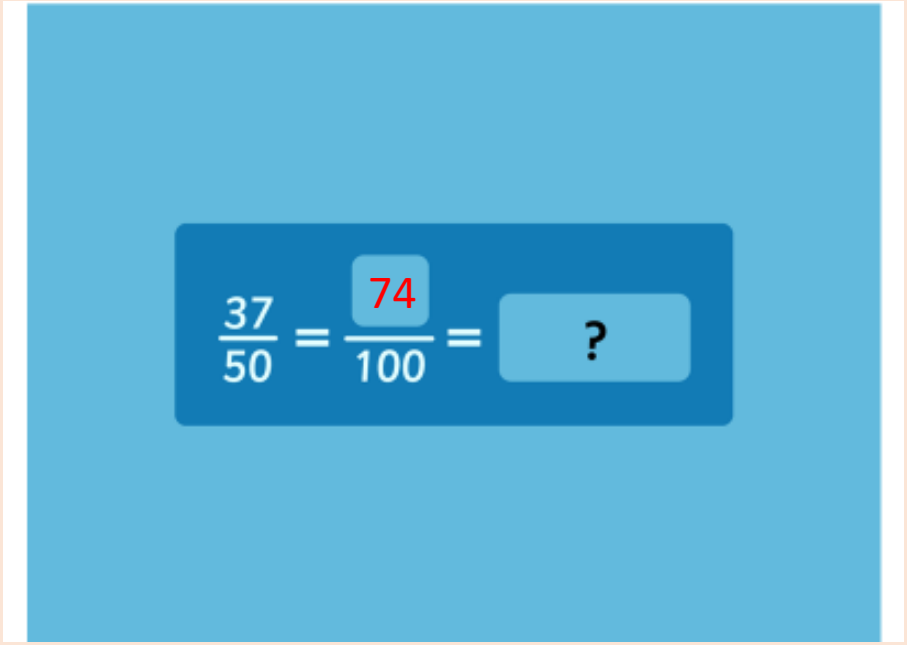
50 x 2 = 100

Whatever number you multiply the denominator by, you must multiply the numerator by that same number too.

So, 37 must be multiplied by 2.

Converting fractions using knowledge of equivalent fractions

To convert some fractions into decimal numbers, you need to convert them into an equivalent fraction.



50 x 2 = 100

37 x 2 = 74

? = 0.74

1) Find the equivalent decimals for these fractions.

$\frac{35}{50}$ $\frac{62}{200}$

$\frac{12}{25}$

2) Find the equivalent fractions for these decimals.

0.41 0.057

0.36 0.75

1) Find the equivalent decimals for these fractions.

$\frac{35}{50} \longrightarrow \frac{70}{100}$ 0.7 $\frac{62}{200} \longrightarrow \frac{31}{100}$ 0.31

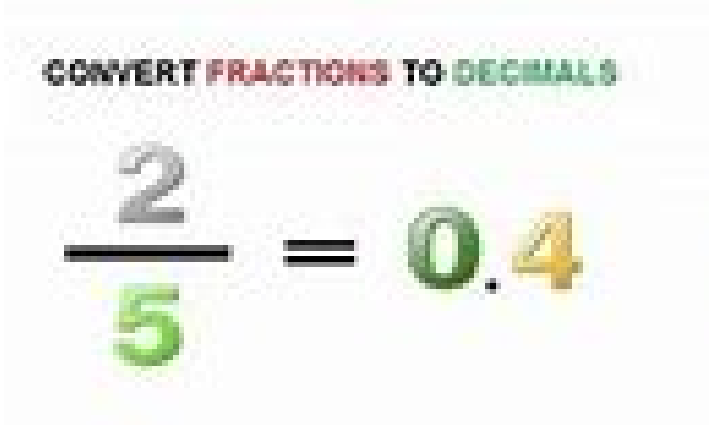
$\frac{12}{25} \longrightarrow \frac{48}{100}$ 0.48

2) Find the equivalent fractions for these decimals.

0.41 $\frac{41}{100}$ 0.057 $\frac{57}{1000}$

0.36 $\frac{36}{100}$ $\frac{18}{50}$ $\frac{9}{25}$ 0.75 $\frac{75}{100}$ $\frac{3}{4}$

Fractions as decimals using division



Fractions to decimals using division

To convert a fraction into a decimal number using division, you will need to divide the numerator by the denominator.

Click on the video link to watch a short video on how to use the bus stop method to find decimal equivalents.

https://www.youtube.com/watch?v=fZ0msVuWou0

Watch the video as many times as you need to and then try the next three varied fluency questions.

Varied Fluency 1

Complete the calculation to convert the fraction below to a decimal.

$\frac{1}{8}$

$$8 \overline{)\, 1 \cdot {}^{1}0 \; {}^{2}0 \; {}^{4}0}$$

Varied Fluency 1

Complete the calculation to convert the fraction below to a decimal.

$\frac{1}{8}$

$$
\begin{array}{r}
0 \cdot 1\ 2\ 5 \\
8 \overline{)\ 1 \cdot {}^{1}0\ {}^{2}0\ {}^{4}0}
\end{array}
$$

Varied Fluency 2

Match the fraction to the correct decimal.

$\frac{3}{8}$

$8 \overline{)\, 3 \cdot {}^{3}0 \; {}^{6}0 \; {}^{4}0}$

A) 0.375

B) 0.357

C) 3.75

Varied Fluency 2

Match the fraction to the correct decimal.

$\frac{3}{8}$

$$
\begin{array}{r}
0.375 \\
8\overline{)\,3.^{3}0\;{}^{6}0\;{}^{4}0}
\end{array}
$$

A) 0.375

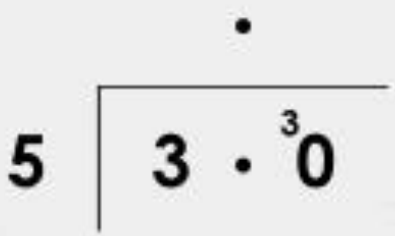
B) 0.357

C) 3.75

Varied Fluency 3

True or false?

$\frac{3}{5}$ can be converted to 0.6.



Varied Fluency 3

True or false?

$\frac{3}{5}$ can be converted to 0.6.

True

$$\begin{array}{r} 0.6 \\ 5\overline{)3.^{3}0} \end{array}$$

Problem Solving 1

Use the short division method to convert the fractions to decimals. Compare using <, > or =.

A) $\frac{6}{5}$

$$5 \overline{)\,6 \cdot 0\ \ 0}$$

☐ 1.3

B) $\frac{2}{8}$

$$8 \overline{)\,2 \cdot 0\ \ 0}$$

☐ 0.19

Problem Solving 1

Use the short division method to convert the fractions to decimals. Compare using <, > or =.

A) $\frac{6}{5}$

$$\begin{array}{r} 1.2 \\ 5\overline{)\,6.{}^{1}0\;\;0} \end{array}$$

< 1.3

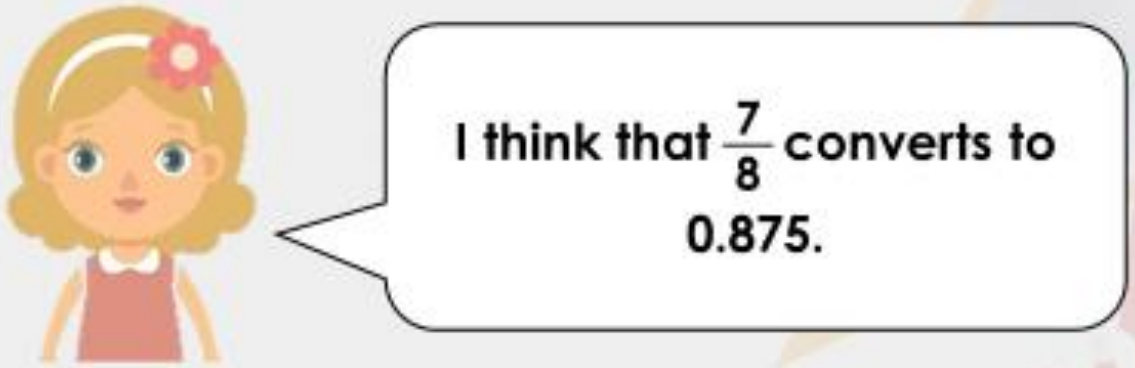
B) $\frac{2}{8}$

$$\begin{array}{r} 0.25 \\ 8\overline{)\,2.{}^{2}0\;\;{}^{4}0} \end{array}$$

> 0.19

Reasoning 1

Holly converts a fraction to a decimal using short division. She says,



Is she correct? Convince me.

Reasoning 1

Holly converts a fraction to a decimal using short division. She says,

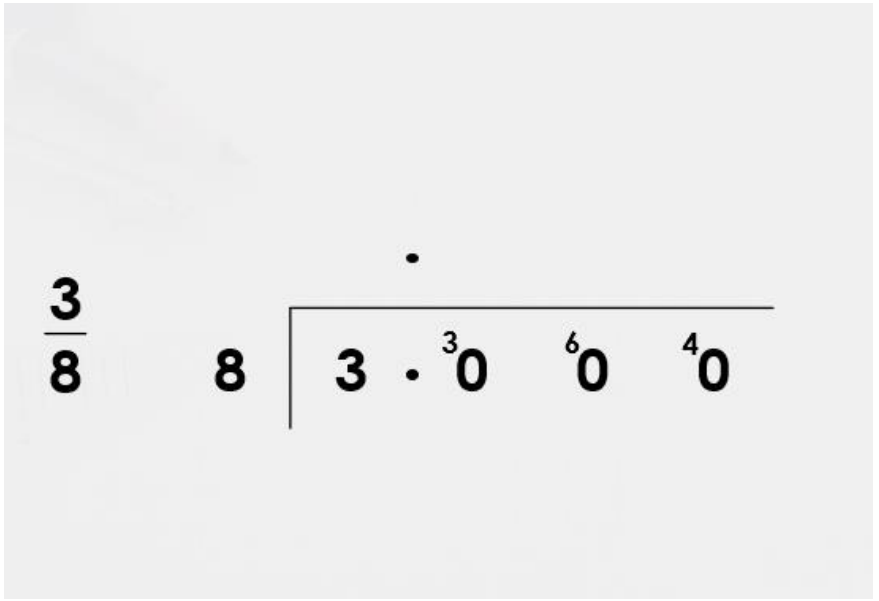
I think that $\frac{7}{8}$ converts to 0.875.

Is she correct? Convince me.

Holly is correct because 7 ÷ 8 = 0.875.

$$
\begin{array}{r|l}
8 & 7 \cdot {}^{7}0 \; {}^{6}0 \; {}^{4}0 \\
\hline
 & 0 \cdot 8 \; 7 \; 5
\end{array}
$$

Main Activity



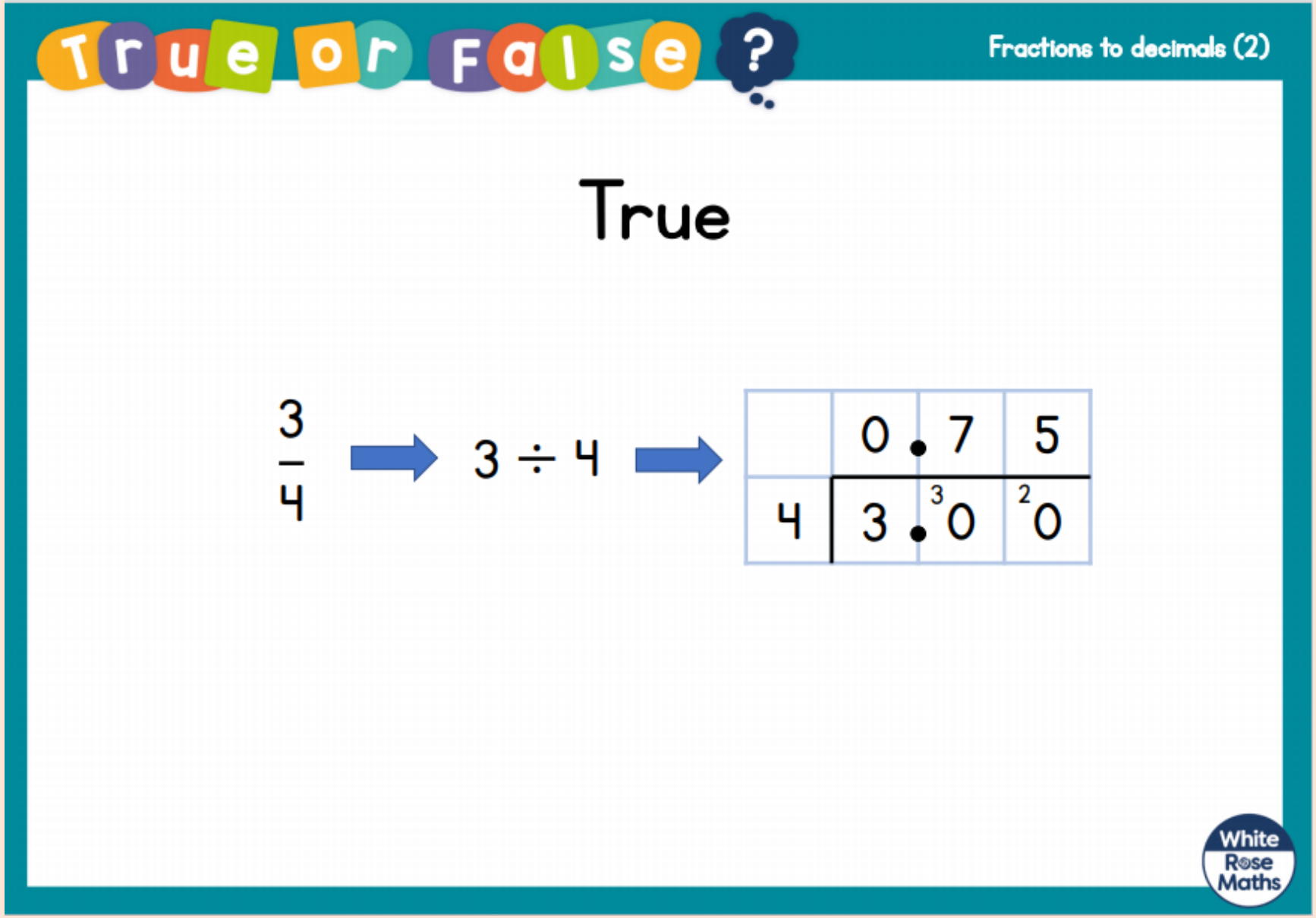
Complete the worksheet- converting fractions to decimals using division.
Complete the RPS worksheet you are normally given in class- red, blue or yellow

Plenary

True or False?

To convert a fraction to a decimal, you can discover the portion of the whole by dividing the numerator by the denominator.

Plenary


True or False ?
Fractions to decimals (2)
True
$\frac{3}{4}$
3 ÷ 4
0 . 7 5
4 | 3 . 3 0 2 0
White Rose Maths