

Changing the denominator to 10, 100 or 1000

If the denominator can easily be multiplied or divided to make 10, 100 or 1000 then this is the easiest method.

Use this method to find the equivalent decimals for the fractions.

$$\frac{12}{50} \xrightarrow{\times 2} \frac{24}{100} = 0.24$$

In each case, think what you need to multiply by or divide by to make the denominator 10, 100 or 1000

a) $\frac{28}{50} = \frac{\boxed{}}{100} = \boxed{}$

c) $\frac{9}{25} = \frac{\boxed{}}{100} = \boxed{}$

b) $\frac{6}{20} = \frac{\boxed{}}{100} = \boxed{}$

d) $\frac{24}{200} = \frac{\boxed{}}{100} = \boxed{}$

$5 \times 2 = 10$

$50 \times 2 = 100$

$20 \times 5 = 100$

$200 \times 5 = 1000$

$25 \times 4 = 1000$

$250 \times 4 = 1000$

IF YOU DIVIDE – you need to be able to divide the numerator and the denominator.

a) $\frac{27}{500} = \frac{\boxed{}}{1000} = \boxed{}$

b) $\frac{62}{250} = \frac{\boxed{}}{1000} = \boxed{}$

c) $\frac{51}{200} = \frac{\boxed{}}{1000} = \boxed{}$

d) $\frac{128}{2,000} = \frac{\boxed{}}{1000} = \boxed{}$

Convert the fractions to their decimal equivalents.

a) $\frac{1}{5} = \boxed{}$

b) $\frac{1}{20} = \boxed{}$

$\frac{1}{10} = \boxed{}$

$\frac{2}{20} = \boxed{}$

$\frac{1}{20} = \boxed{}$

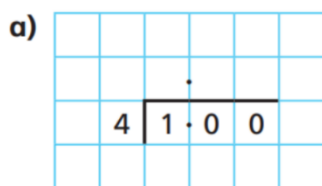
$\frac{3}{20} = \boxed{}$

Using Short division to convert fractions to decimals

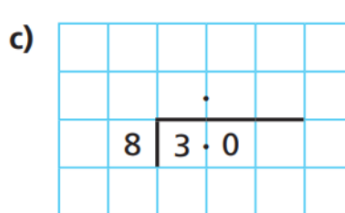
Fractions are actually division so this is the best option to use if the denominator cannot easily be changed to a multiple of ten.

$3/4$ is actually 3 divided by 4 $3 \div 4$
$$\begin{array}{r} 0.75 \\ 4 \overline{) 3.00} \\ \underline{3} \\ 0 \\ \underline{0} \\ 0 \end{array} = 0.75$$

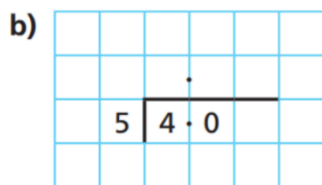
$3/8$ is actually 3 divided by 8 $3 \div 8$
$$\begin{array}{r} 0.375 \\ 8 \overline{) 3.000} \\ \underline{24} \\ 60 \\ \underline{56} \\ 40 \\ \underline{40} \\ 0 \end{array} = 0.375$$



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



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



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

d) Use the short division to work out which is greater $5/8$ or 0.46 ?

e)



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

Jack is incorrect.

Explain the mistake that Jack has made.

 Match the fractions to the equivalent decimals.

$$\frac{2}{5}$$

$$0.04$$

$$\frac{1}{25}$$

$$0.4$$

$$\frac{1}{4}$$

$$0.25$$

 Use your knowledge of known fractions to convert the fractions to decimals. Show your method for each one.

$$\frac{7}{20}$$

$$\frac{3}{4}$$

$$\frac{2}{5}$$

$$\frac{6}{200}$$

 Use the short division method to convert the fractions to decimals. Write the decimals to three decimal places.

$$\frac{5}{8}$$

$$\frac{4}{5}$$

$$\frac{8}{5}$$

 8 friends share 7 pizzas.
How much pizza does each person get?
Give your answer as a decimal and as a fraction.