



**THIRD SPACE  
LEARNING**



# HELLO!

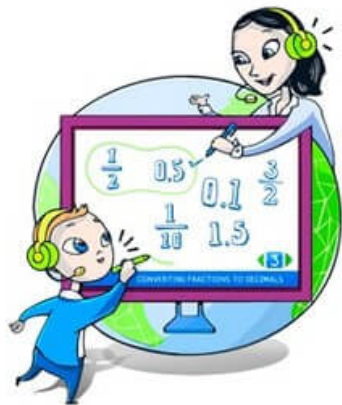
Today we are going to revise fractions,  
decimals and percentages

## Arithmetic Warm Up




1.  $\frac{3}{4} - \frac{1}{3} =$

2.  $\frac{3}{6}$  of 36 =


# Revision on changing fractions to decimals and percentages

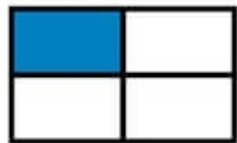


Today we are going to revise how to:

-  find decimal equivalents of fractions
-  represent fractions, decimals and percentage equivalents
-  find percentages of an amount

## Revision: Fraction and decimal equivalents

 1. Can a fraction be written as a decimal?



$$= \frac{\boxed{\phantom{00}}}{\boxed{\phantom{00}}} = \frac{\boxed{\phantom{00}}}{\boxed{100}} = \boxed{\phantom{00}}$$

Think about a quarter  
- how do you write it  
as a fraction and how  
do you write it as a  
decimal number?

Did you know that the  
fraction bar in a fraction  
means the same as the  
fraction bar in the division  
sign?



$\frac{1}{4}$  ← same →  $\div$

 2.  $\frac{1}{4}$  is the same as  $1 \div 4$  so,

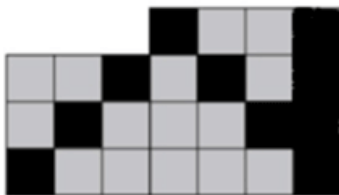
$$\begin{array}{r} \boxed{\phantom{000}} \\ 4 \overline{) 1} \end{array}$$

## Question 1



Complete

1. What do you notice?
2. What do you know?
3. Can you show your working out?
4. How could you extend the question?



Describe the shaded part of this shape as a:

a) Fraction in its simplest form

b) decimal



## Revision: Fractions, decimals and percentages

Percentage (%) simply means 'out of 100'

So when a fraction has 100 as the denominator, it can easily be written as a decimal or a percentage.

$$\frac{3}{4} = \frac{75}{100} \quad \begin{array}{l} \nearrow = 75 \div 100 = 0.75 \\ \searrow = 75\% \end{array}$$

Find the equivalent fraction, making the denominator 100

Think  
- how would you write  
75% as a fraction and  
a decimal?



1. Write 64% as a fraction and a decimal.

## Question 2

1. What do you notice?
2. What do you know?
3. Can you show your working out?
4. How could you extend the question?

Write these in order of size, starting with the smallest.

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

0.34

0.7

43%



smallest



THIRD SPACE  
LEARNING



## Revision: Finding percentages

Find  $30\%$  of  $48$  also written as  $30\% \times 48$

1) This whole bar could represent 48  
(this is the 100% of the amount)

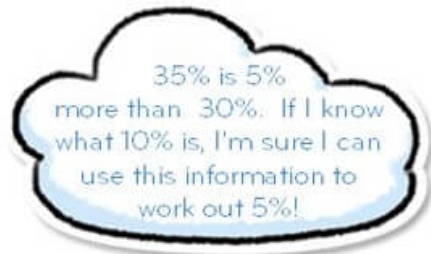
2) How many equal parts has  
this bar been divided into?  
So what percent does each part  
represent?



4) So how many parts would give you 30%?  
What is 30% of 48?  
Check your answer – does it seem reasonable?

3) What number would go into  
each part if the whole bar is 48?

1. What would  $35\%$  of  $48$  be?





## Question 3



Use the space provided to complete the following question

200 children went on holiday.

10% of the children went to Wales.




25% of the children went to Scotland.

How many **more** children went to Scotland than went to Wales?

1. What do you notice?
2. What do you know?
3. Can you show your working out?
4. How could you extend the question?

## Let's review:



-  find decimal equivalents of fractions
-  represent fractions, decimals and percentage equivalents
-  find percentages of an amount

Draw a circle around the smiley face to show how you feel about what we've just been doing.



# CHALLENGE



Complete

1. What do you notice?
2. What do you know?
3. Can you show your working out?
4. How could you extend the question?

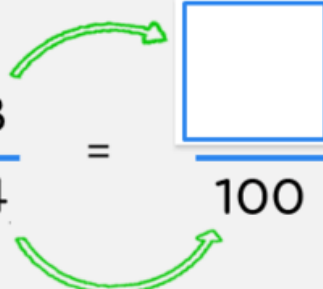
What percentage of 20 is 19?



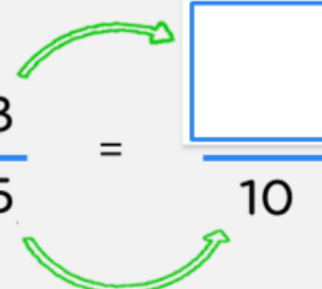
%

## Simple fractions to decimals

Convert these fractions to equivalent fractions and then write as a decimal.

$$\frac{3}{4} = \frac{\boxed{\phantom{000}}}{100}$$


$$= \boxed{\phantom{0.00}}$$

$$\frac{3}{5} = \frac{\boxed{\phantom{000}}}{10}$$


$$= \boxed{\phantom{0.00}}$$



## Fractions to percentages

1. Write  $\frac{3}{20}$  as a percentage,

2. Write  $\frac{6}{25}$  as a percentage.

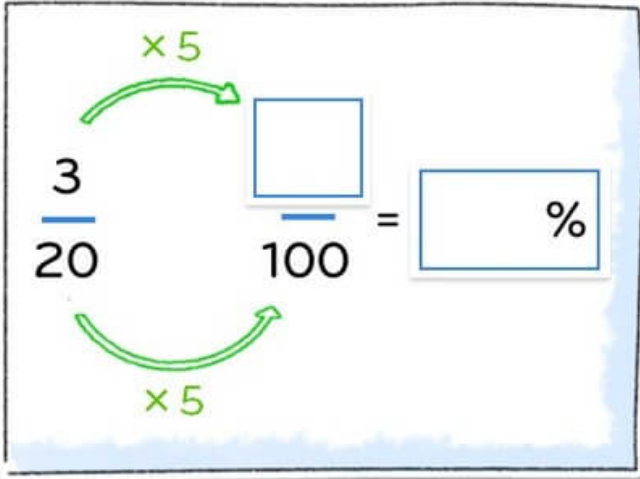


Diagram illustrating the conversion of  $\frac{3}{20}$  to a percentage. The fraction  $\frac{3}{20}$  is shown on the left. A box containing a blank space above a horizontal line and '100' below it is in the middle. A box containing a blank space followed by a '%' symbol is on the right. A curved arrow labeled 'x 5' points from the denominator '20' to the '100' box. Another curved arrow labeled 'x 5' points from the numerator '3' to the top box.

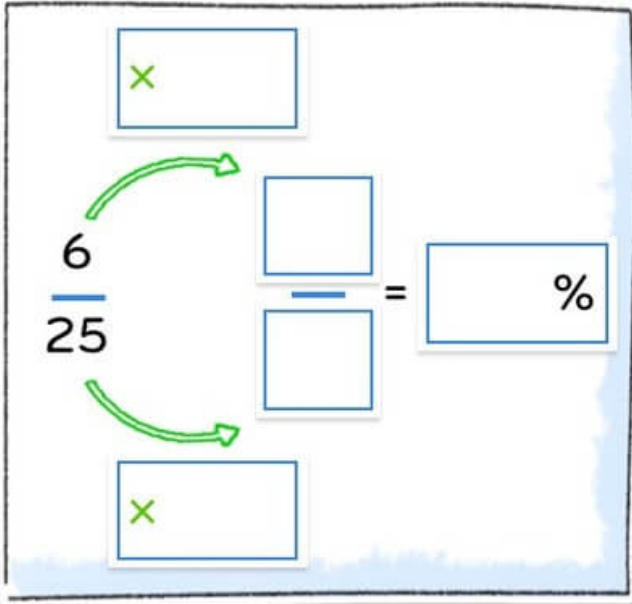


Diagram illustrating the conversion of  $\frac{6}{25}$  to a percentage. The fraction  $\frac{6}{25}$  is shown on the left. A box containing a blank space above a horizontal line and a blank space below it is in the middle. A box containing a blank space followed by a '%' symbol is on the right. A curved arrow labeled 'x' points from the denominator '25' to the top box. Another curved arrow labeled 'x' points from the numerator '6' to the bottom box.

## Percentages of quantities

$$50\% = \frac{\boxed{\phantom{00}}}{\boxed{\phantom{00}}} = \frac{\boxed{\phantom{00}}}{\boxed{\phantom{00}}}$$

1.  $50\%$  of  $300 = \frac{\overset{1}{\boxed{\phantom{00}}}}{\boxed{\phantom{00}}}$  of  $300 = 300 \div \boxed{\phantom{00}} = \boxed{\phantom{00}}$

2.  $50\% \times 50 =$

3.  $50\%$  of  $8.4 =$

## Percentages of quantities

$$25\% = \frac{\boxed{\phantom{00}}}{\boxed{\phantom{00}}} = \frac{\boxed{\phantom{00}}}{\boxed{\phantom{00}}}$$

1. 25% of 300 =

2. 25% x 60 =

3. 75% = 50% +  %

4. 75% of 180 = 50% of 180 +  % of 180



## Question 4



Emily makes 250 grams of a snack mixture.

15% of the weight is raisins, 25% is banana chips and the rest is peanuts.

How many grams of **peanuts** does she use?

1. What do you notice?
2. What do you know?
3. Can you show your working out?
4. How could you extend the question?