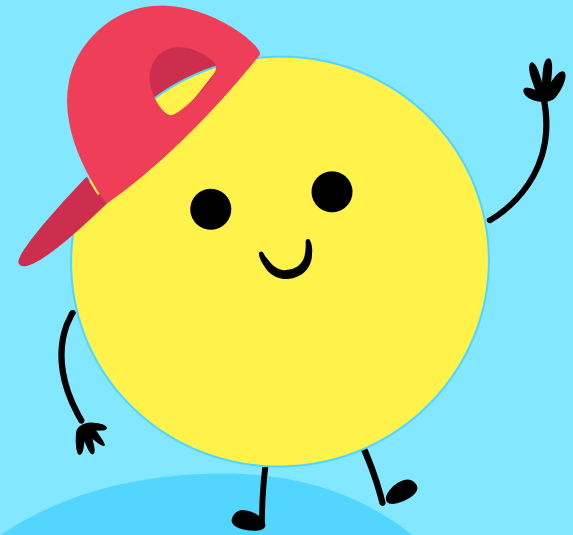
Learning About Decimals, Fractions, and Percentages!

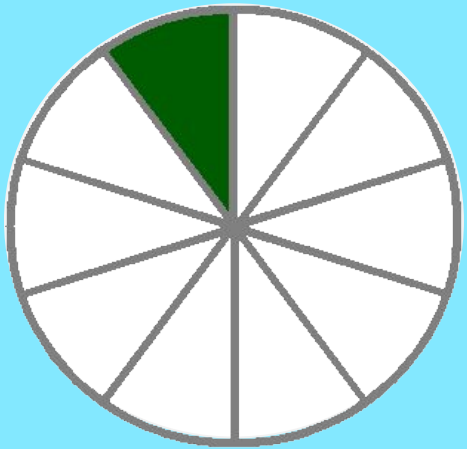


What is a Decimal?

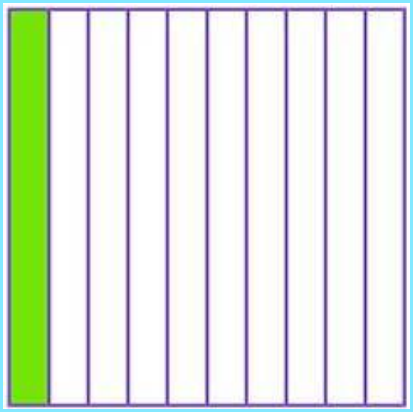
A decimal is a dot that separates a whole number and a fraction!

Decimals are Fractions!

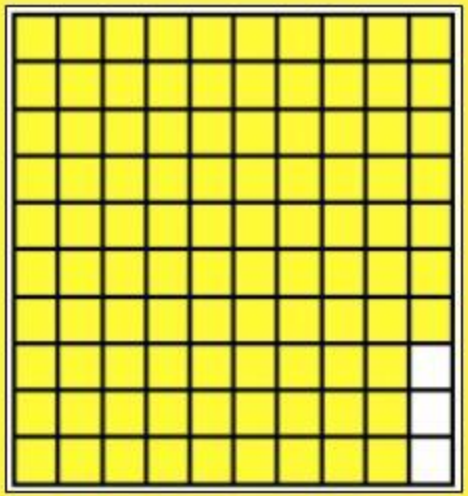
$$\frac{1}{10}$$



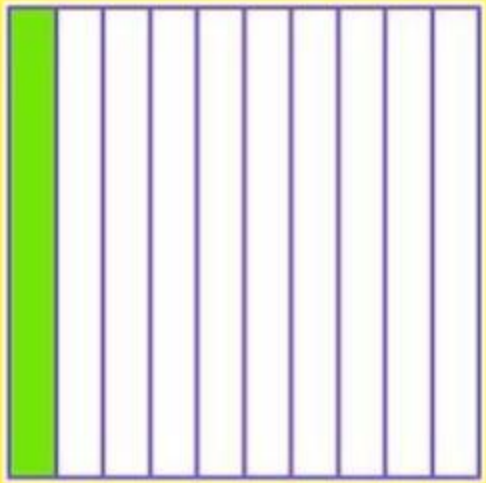
0.10



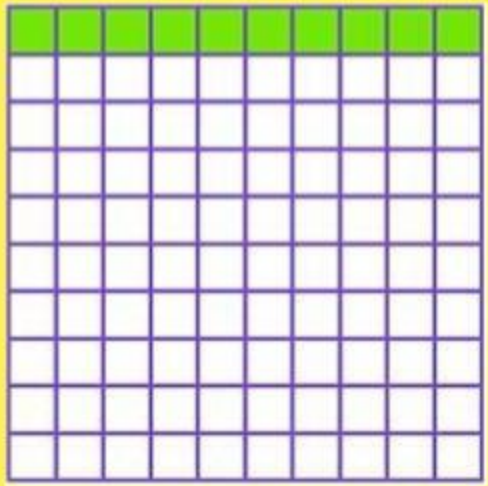
Fractions with denominators of 10 and 100 can be written as decimals.



Fraction	=	Decimal



Fraction	=	Decimal



Fraction	=	Decimal

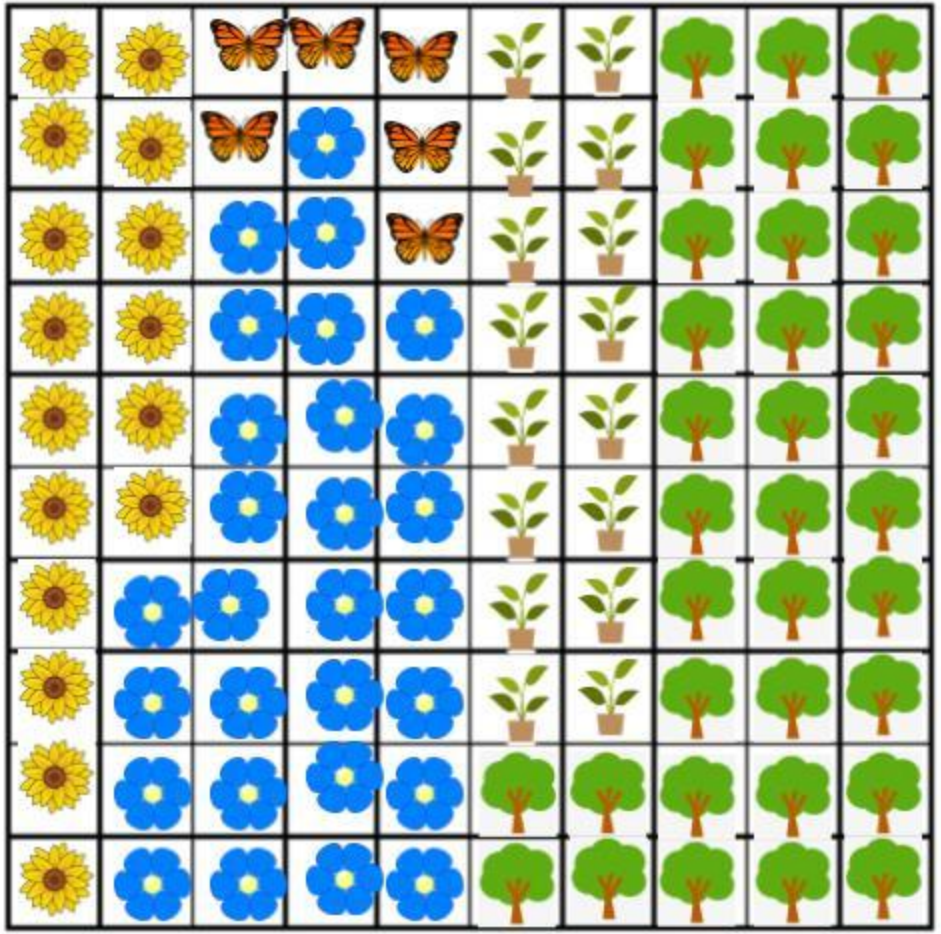
Fraction: Decimal:

Fraction: Decimal:

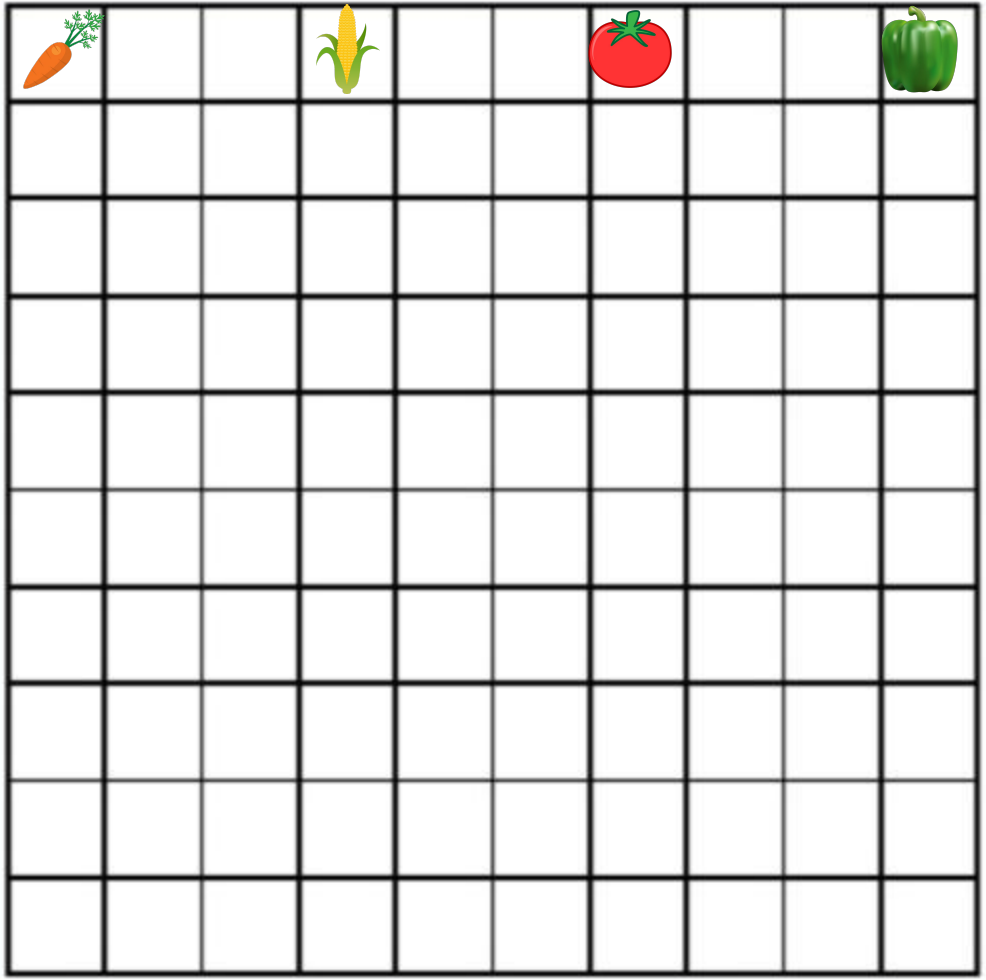
Fraction: Decimal:

Fraction: Decimal:

Fraction: Decimal:



Activity Time!



1. Create your own garden using these pictures.

2. Describe the part of your garden with each vegetable in fractions and decimals.
eg, carrots: 20/100 and 0.20

Fraction:

Decimal:

Fraction:

Decimal:

Fraction:

Decimal:

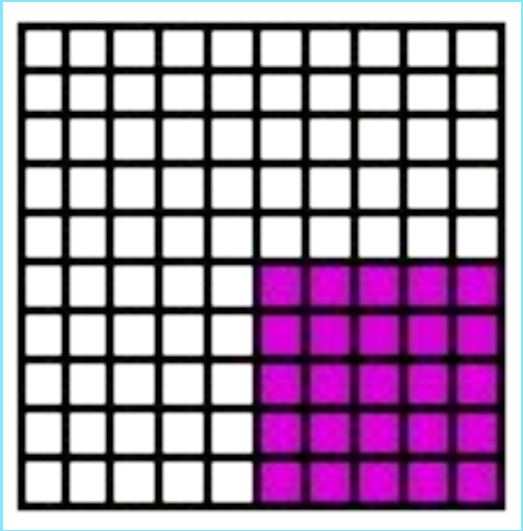
Fraction:

Decimal:

How do you know when you can turn a fraction into a decimal???

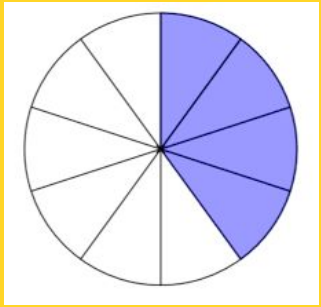
How do we know ¼ can be changed to a decimal?

Hint: Think about equivalent fractions!

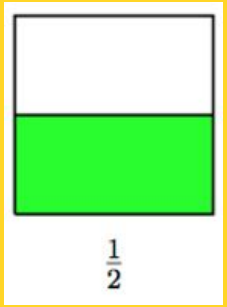


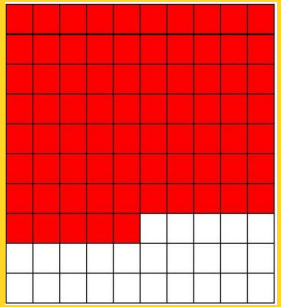
Practice!

Let's use equivalent fractions to turn these fractions into decimals!



$\frac{4}{8}$





$\frac{25}{100}$

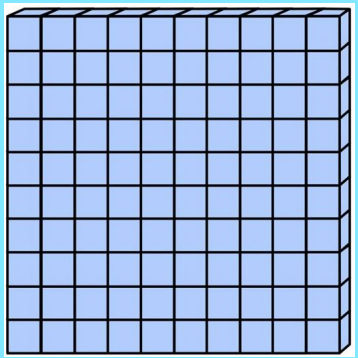
We See Decimals in Our Money!

	Tens	Ones	Tenths	Hundredths
$	2	5	1	5

= 1 penny 

1 penny = $\frac{1}{100}$ of a dollar

= 1 dime
= 10 pennies 



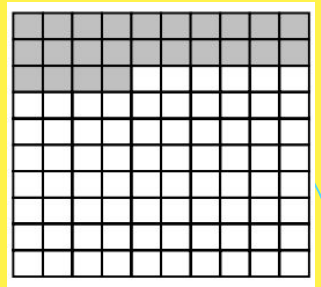
= 1 dollar
= 10 dimes
= 100 pennies

24 cents

Money: $ 0.24 or 24 ¢

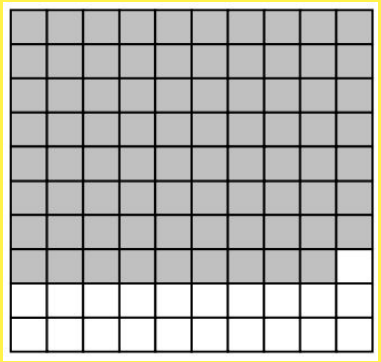
Decimal: 0.24

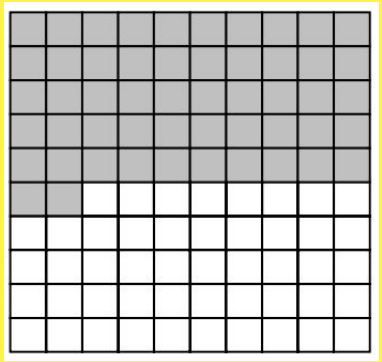
Fraction: $\frac{24}{100}$

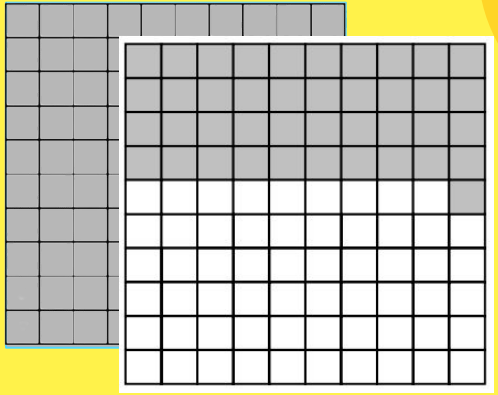


Express these hundreds flats as money, decimals and a fraction

Money	Decimals	Fraction

1. 

2. 

3. 

Match the decimals and money with their matching fraction!

Decimal	Money	Fraction
0.5		

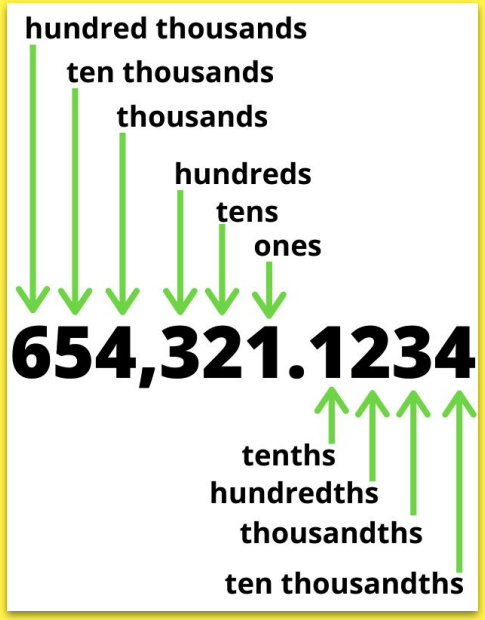
Ordering Decimals!

To compare decimals:

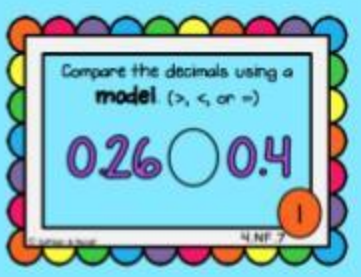
1. Look left to right
2. Find the first digit that is different.
3. The bigger digit = the larger number

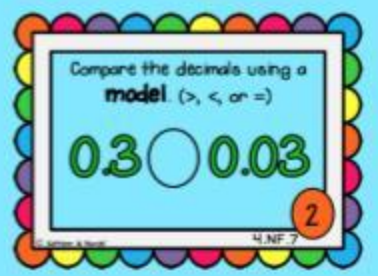
654 100.102
654 099.789

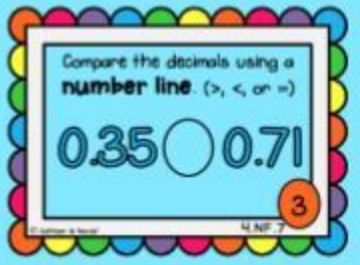
0.3951
0.4001

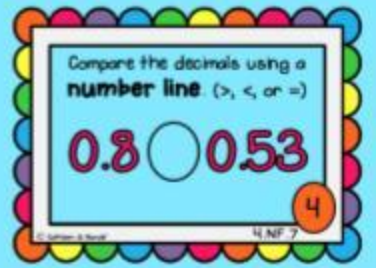


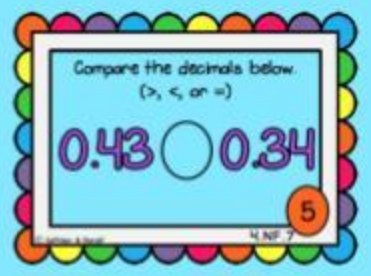
< > = Let's Compare!

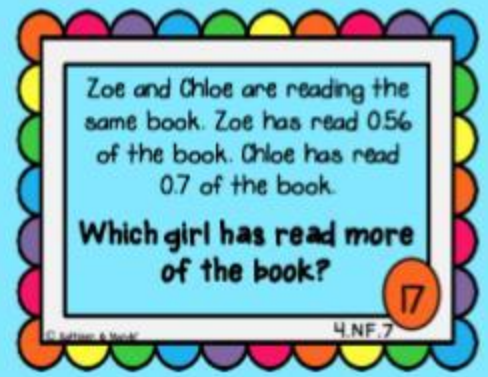






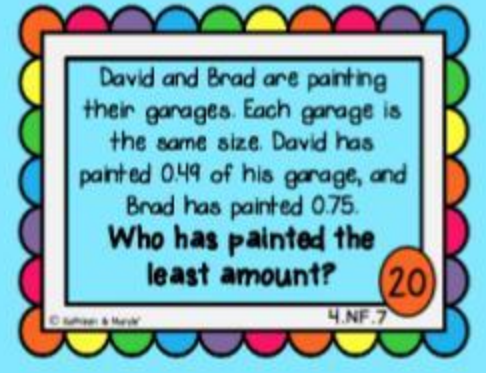






Zoe

Chloe



David

Brad

Ordering Decimals!

Order the following numbers from LEAST to GREATEST.

1) 0.4 0.45 0.5

2) 0.79 0.7 0.47

3)

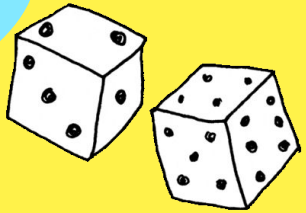
In a school survey of favourite activities, 0.44 students voted for soccer, 0.4 voted for art, and 0.52 voted for track and field.

Place these votes from Greatest to Least.

0.44 0.4 0.5

2

Decimal Challenge!



1. Roll a dice 5 times.
2. Place each number in one of the place values.
3. The remaining spot is a zero.

Winner is the person with the largest decimal number!

Thousands	Hundreds	Tens	Ones	Tenths	Hundredths
1	8	2	0	5	6

Did You Know Fractions can be Percentages too?

Percentages express rates out of 100.
“Percent” means “per hundred”

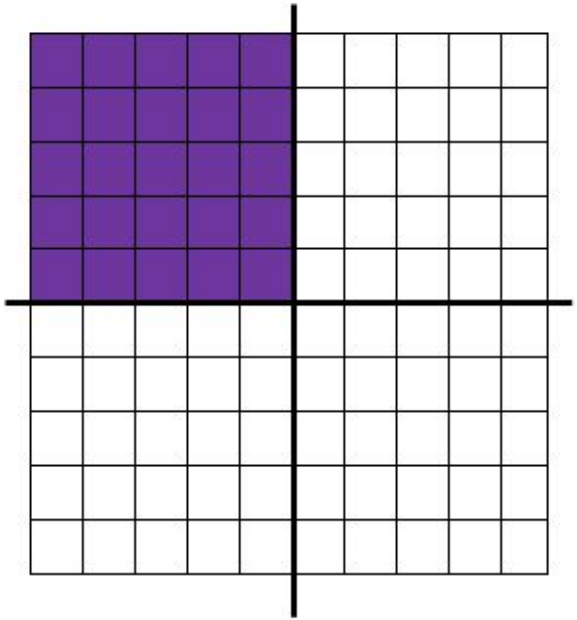
Examples:

1/100 = 1% = 0.01

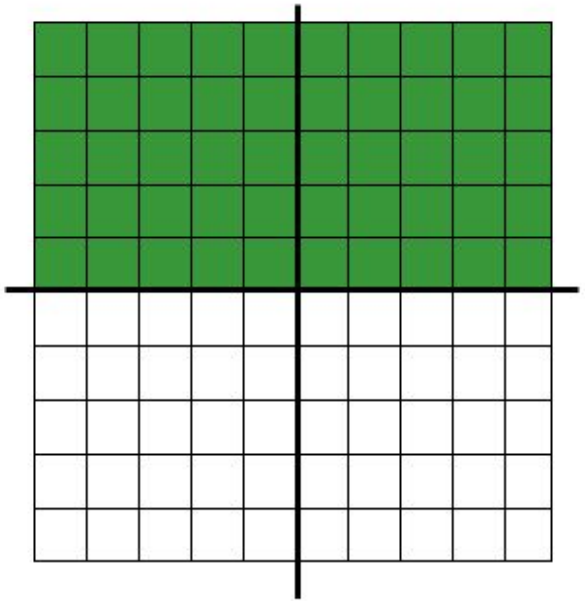
5/10 = 50/100 = 50% = 0.50

You can make any fraction with a denominator of 100 into a percentage!

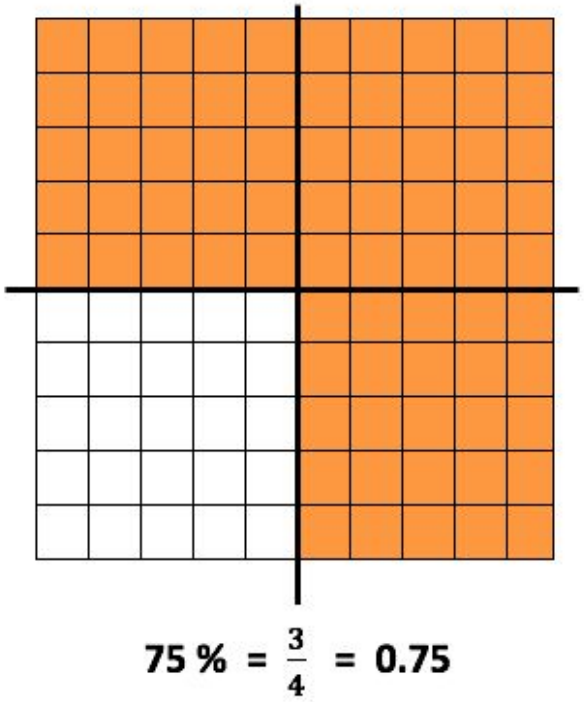
Let's Check Out Some Percentages!



$25\% = \frac{1}{4} = 0.25$



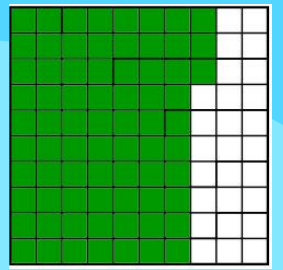
$50\% = \frac{1}{2} = 0.5$



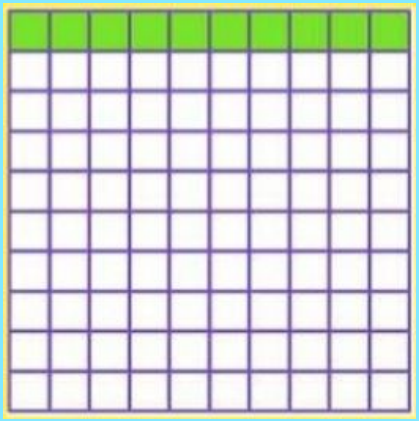
$75\% = \frac{3}{4} = 0.75$

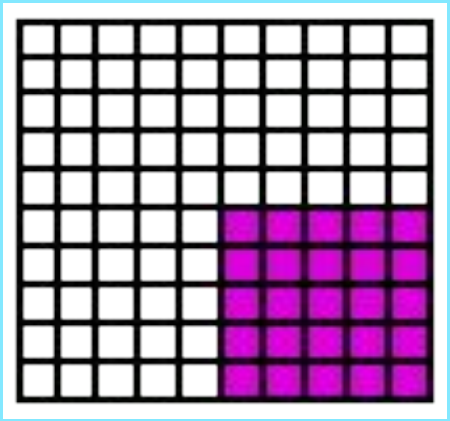
Converting Decimals to Percentages

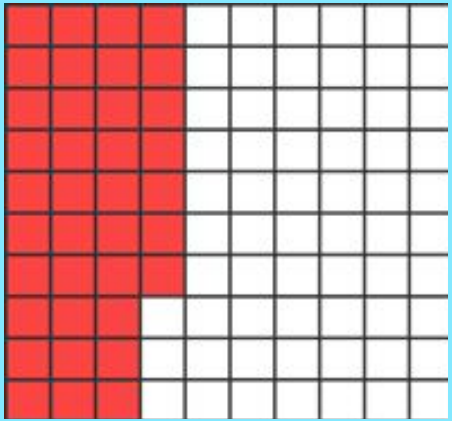
Count the number of shaded squares out of the 100s flat.
That number is your percentage!



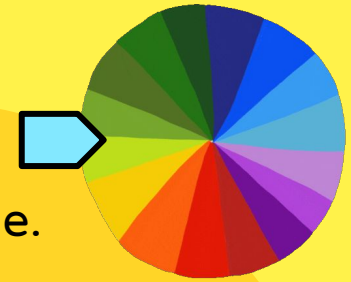
73/100 = 73%







Let's Practice



1. Spin the spinner and write your decimal in the box.
2. Then convert it to a fraction out of 100 and a percentage.
3. Repeat this 4 times with different decimals.

Decimal	Fraction	Percent