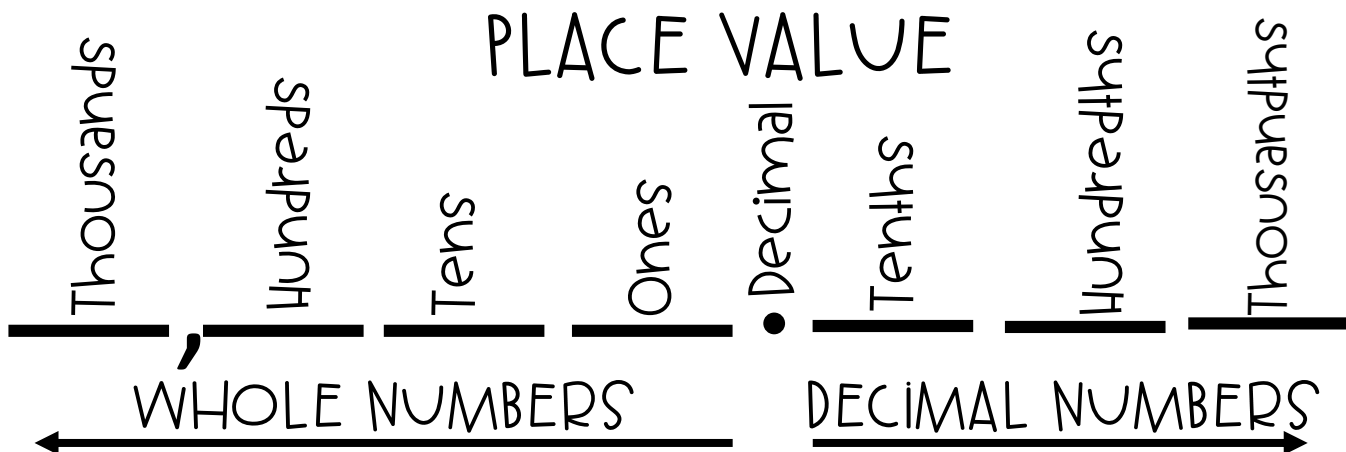


All you need to know about...

Decimals



All the FORMS
of DECIMALS

STANDARD
FORM: 56.97

Written From: (write exactly how you read the number)
Fifty-six and ninety seven hundredths

Expanded form three ways:

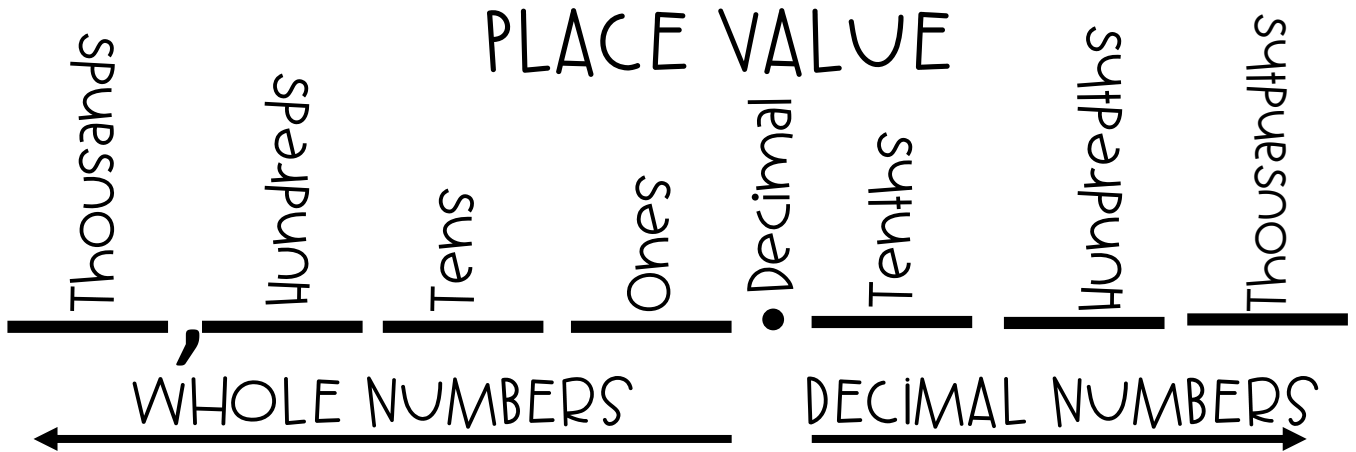
1. $50 + 6 + .9 + .07$

2. $(5 \times 10) + (6 \times 1) + (9 \times .1) + (7 \times 0.01)$

3. $(5 \times 10) + (6 \times 1) + (9 \times 1/10) + (7 \times 1/100)$

All you need to know about...

Decimals



Adding & Subtracting

Steps

1. Line up the decimals!
2. Drop the Decimal!
3. Add or Subtract as normal.
4. FINISHED!

PRO TIP: BEHIND EVERY WHOLE NUMBER THERE IS AN IMAGINARY DECIMAL.

$$\begin{array}{r}
 56.97 \\
 + 7.52 \\
 \hline
 64.49 \\
 56.97 \\
 - 5.00 \\
 \hline
 51.97
 \end{array}$$

All **you** need to know about...
multiplying

MULTIPLY BY THE
ONES PLACE FIRST
THEN THE TENS
PLACE.

$$\begin{array}{r} 4 \quad 6 \\ 3 \quad 4 \\ 569 \end{array}$$

MARK OUT
THE THINGS
YOU'VE
ALREADY
USED.

$$\begin{array}{r} X \quad 75 \\ \hline \end{array}$$

$$\begin{array}{r} 2945 \\ + 39830 \\ \hline 4,2775 \end{array}$$

DON'T
FORGET
YOUR
PLACE
HOLDER
ZERO!!!

IMPORTANT VOCABULARY:

NUMBERS BEING MULTIPLIED TOGETHER ARE

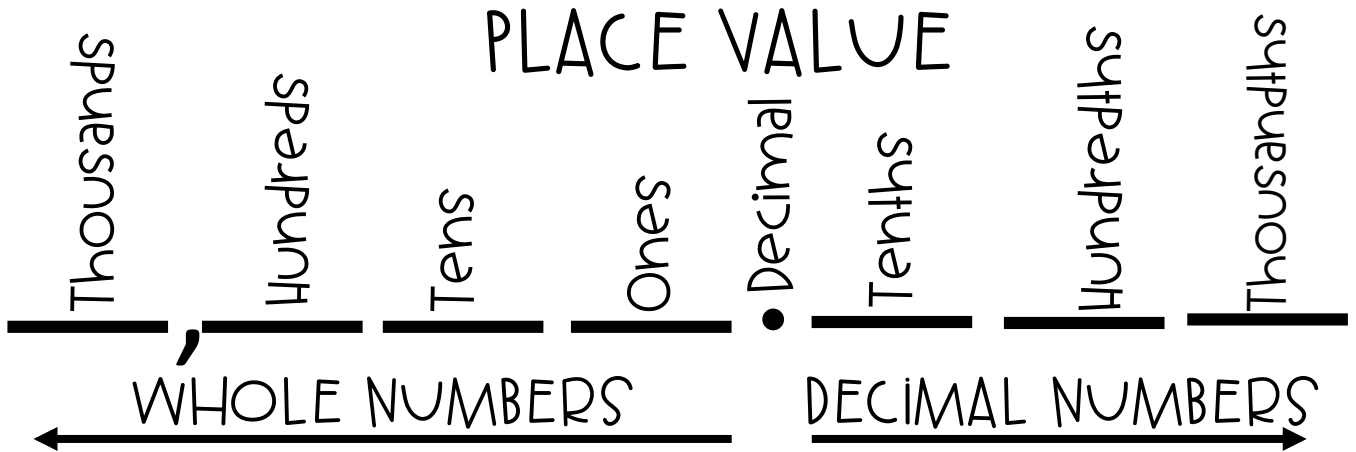
CALLED **FACTORS**.

THE ANSWER TO A MULTIPLICATION PROBLEM IS

CALLED A **PRODUCT**.

All you need to know about...

Decimals



Multiplying Decimals

Steps

1. Multiply as normal.
2. Count Decimal places
3. Move the imaginary decimal
4. FINISHED!

$$\begin{array}{r} 56.97 \\ \times 7.2 \\ \hline 410.184 \end{array}$$

All **you** need to know about...
Dividing

DOES
MCDONALDS
SELL
CHEESE
BURGERS?

$$\begin{array}{r} 15 \\ 24 \overline{) 336} \\ \underline{-24} \\ 96 \\ \underline{-96} \\ 0 \end{array}$$

WRITE YOUR
MULTIPLES!

multiples

24

36

48

72

96

DIVIDE

MULTIPLY

SUBTRACT

CHECK

BRING DOWN

IMPORTANT VOCABULARY:

THE NUMBER BEING DIVIDED IS THE DIVIDEND. THE
NUMBER DOING THE DIVIDING IS THE DIVISOR
THE ANSWER TO A DIVISION PROBLEM IS CALLED
THE QUOTIENT.

All *you* need to know about...

Fractions

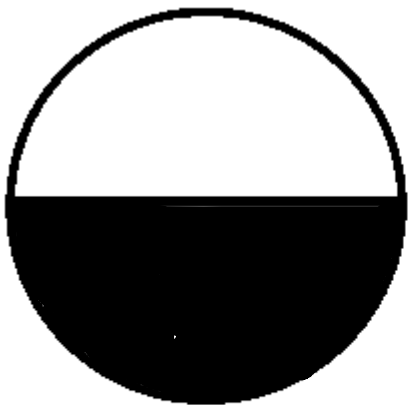
.....

FRACTIONS ARE PART OF A WHOLE.

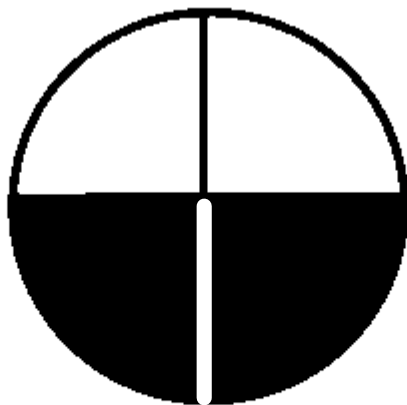
2 The numerator is the part of a whole.

4 The denominator is how many parts make up the whole.

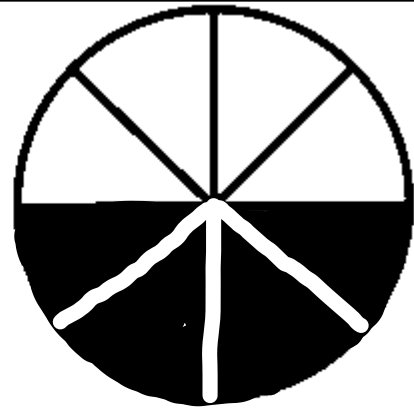
Equivalent fractions: Fractions that take up the same amount of space and can be simplified into the same lowest number.



$\frac{1}{2}$



$\frac{2}{4}$



$\frac{4}{8}$

All you need to know about...
Fractions

ADDING & SUBTRACTING FRACTIONS

$$\frac{2}{4} + \frac{1}{4} =$$

Pro Tip: Fractions with unlike denominators cannot be added or subtracted!

$$\frac{4}{8} + \frac{1}{8} = \frac{5}{8}$$

L.C.D.

Least Common Denominator: The smallest number that both denominators will go into.

	4	8
x1	4	8
x2	8	16
x3	12	24

SUBTRACTION - FOLLOWS THE SAME STEPS!

All you need to know about... mixed #s

MAKE IT AN IMPROPER FRACTION

$$4 \frac{1}{8} = \frac{33}{8}$$

MIXED NUMBER

IMPROPER FRACTION

What is a mixed number?

A mixed number is a combination of a whole number & a Fraction.

What is an improper number?

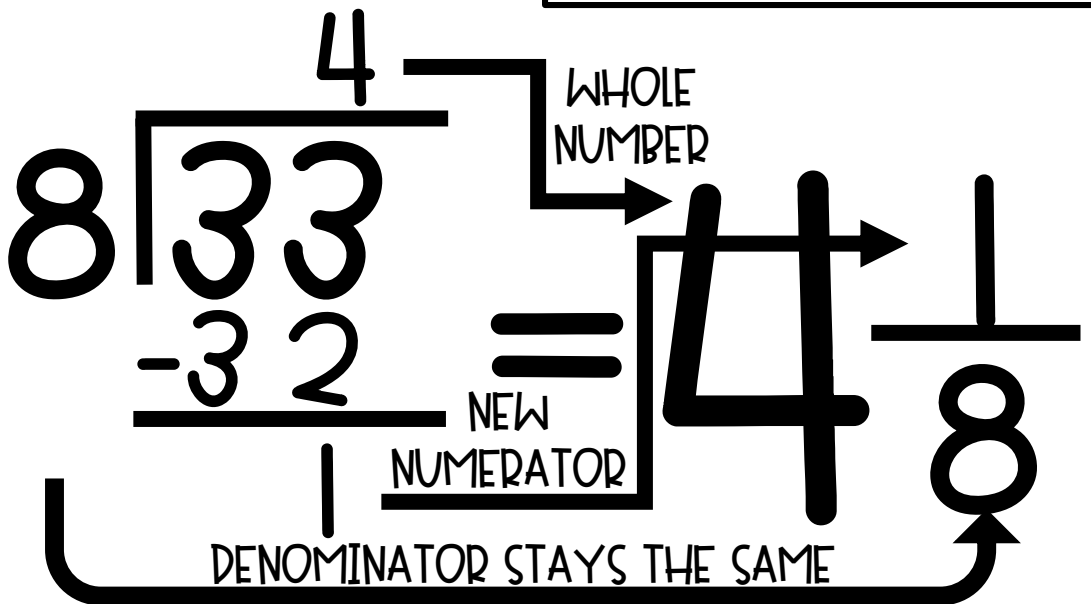
A Fraction that has a larger numerator than denominator.

MAKE IT A (SIMPLIFIED)

MIXED NUMBER

Multiples

	8
x1	8
x2	16
x3	24
x4	32



All you need to know about...
Fractions

MULTIPLYING UNIT FRACTIONS
by **A WHOLE NUMBER**

UNIT FRACTION

$$\frac{1}{4} \times 8 = \frac{8}{4}$$

UNIT FRACTION: a fraction with a one in the numerator

WHOLE NUMBERS GO OVER ONE!

Steps:

1. Multiply across the top.
2. Multiply across the bottom.
3. Simplify your answer
4. Now, you got it!

Simplify your answer

$$\frac{8}{4} = 4 \overline{)8} = 2$$

A REMAINDER OF ZERO MEANS NOTHING!!! NO NEW NUMERATOR, JUST A WHOLE NUMBER!

All **you** need to know about...
Fractions

DIVIDING UNIT FRACTIONS by **A WHOLE NUMBER** & **DIVIDING WHOLE NUMBERS** by **UNIT FRACTIONS**

UNIT FRACTION: a fraction with a one in the numerator

ANALYZE THE PROBLEM

Arianna wants to bake cookies, she has $\frac{1}{5}$ pound of sugar. She made 5 batches of cookies, how much sugar is in each batch?

(What is being divided up?!)... **THE SUGAR!**

SOLVE BY:

There is...

$\frac{1}{5} \div 5 = \frac{1}{5} \times \frac{1}{5} = \frac{1}{25}$

KEEP FLIP
CHANGE

Now follow multiplication rules...

Of a pound of sugar in each batch.

All *you* need to know about...
Fractions

DIVIDING UNIT FRACTIONS by **A WHOLE NUMBER** & **DIVIDING WHOLE NUMBERS** by **UNIT FRACTIONS**

UNIT FRACTION: a fraction with a one in the numerator

ANALYZE THE PROBLEM

Julissa has 20 cookies, she cuts each cookie into fourths. How many cookies does she have now?

(What is being divided up?!) ... **THE COOKIES!**

SOLVE BY:

Now follow multiplication rules...

KEEP FLIP

$$20 \div \left(\frac{1}{5}\right) = \frac{20}{1} \times \frac{5}{1} =$$



$$\frac{100}{1} =$$

She now has

100 cookies

All *you* need to know about...

The Quadrilateral Hierarchy

Quadr means FOUR!
Quadrilaterals are FOUR sided shapes!

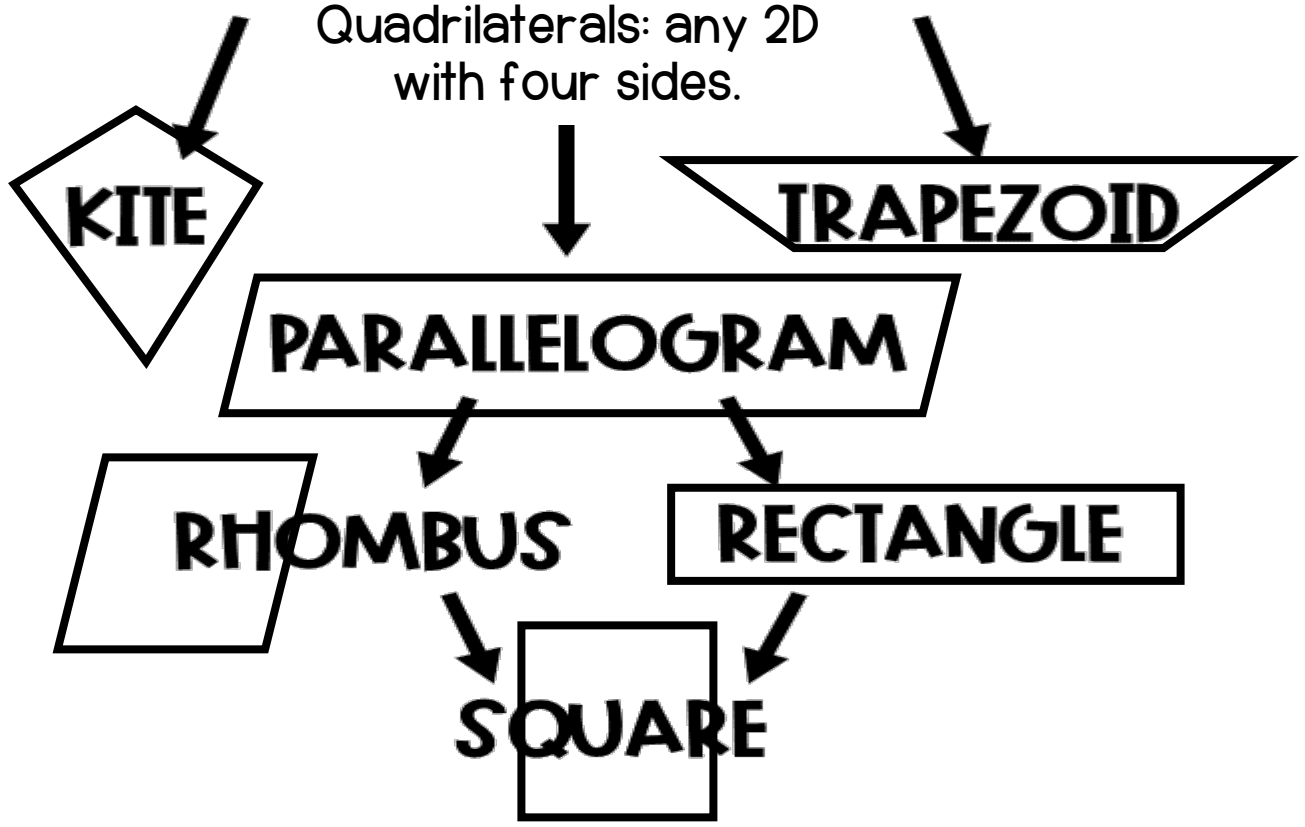


POLYGON

Polygon: any 2D figure made of line segments, straight lines.

QUADRILATERAL

Quadrilaterals: any 2D with four sides.



All *you* need to know about...

Area, Perimeter & Volume

PERIMETER
PERIMETER
AREA
PERIMETER
PERIMETER

What is area?

Area is how much space a shape takes up, or the inside of the shape.

A = LENGTH X WIDTH

To find area of a rectangle or square, multiply the length by the width.

What is volume?

Volume is how much it takes to fill the shape. Volume is made of layers. To find the volume of a rectangular prism or a cube, multiply length by width by height.

V = L X W X H

V = BASE X HEIGHT

Base = length x width

Base is one layer of the cube.

What is perimeter?

Perimeter is the border or the outside of the shape.

To find perimeter of ANY shape,
add all sides!!!

P = ADD ALL SIDES

