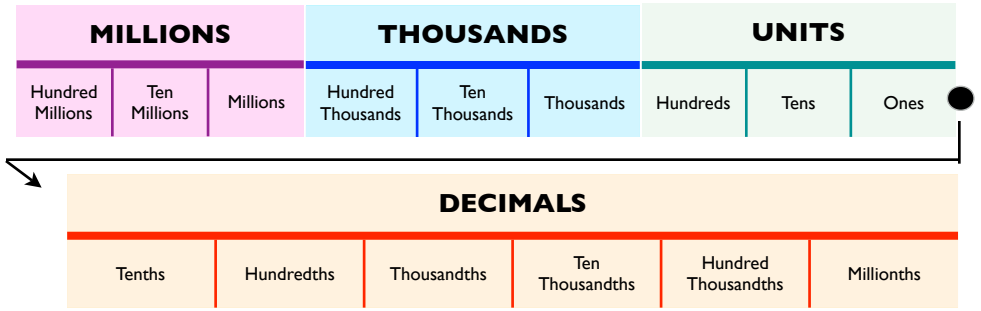
Place Value



Rounding

1. Underline the place value that you are rounding to.
2. Circle the number to the right and draw an arrow to the place value spot you are rounding to (this is the number that give the directions.
3. If the circled number is "bossy" (5 or More) move the underlined number up one more. If the circled number is 1 to 4, then just ignore!
4. Everything after the underlined number becomes a zero.
5. Everything before the underlined digit stays the same!

57689
58000

5 7 4 8 9
5 7 0 0 0

Expanded Form

Expanded form shows the number expanded into an addition statement.

2,498.7028

In expanded form you do not have to show the zero.

2000 + 400 + 90 + 8 + .7 + .002 + .0008

Start with the largest place value spot. Show each digit in its place value spot plus the next digit in its place value spot and so on.

Expanded Notation

Expanded notation multiplies each digit in the number by the matching place value, them adds all of the products together.

309.572

(100 x 3) + (10 x 0) + (1 x 9) + (0.1 x 5) + (0.01 x 7) + (0.001 x 2)

Stat with the largest place value spot. Show the place value location (represented with a one in the place value spot) times the digit plus the next place value location and so on.

Written Form

The number written in word. This is how you say the numbers!

405.23

Four hundred five and twenty three hundredths

1. Write the number to the left of the decimal how you say it.
2. Write "and" to replace the decimal.
3. Write the number to the right of the decimal how you say it.
4. Identify the place value spot of the last digit that is NOT a zero and add its name to the end.

Standard Form

The number written in digits. This is how you typically see numbers every day!

9,765.980

Addition

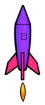
Word that tell you to ADD:

Sum, More Than, Greater Than, Increase, Altogether, Total

Addition Sign: +

Adding Decimals: When you are adding decimals, make sure to line up the decimals and then add. Remember: Pretend your pencil is a rocket - in order for the rocket to blast off the decimals have to line up!

4	0	2
+	7	5



Vocabulary

Expression: A number, letter, or combination of the two. There is not an equal sing in an expression. Examples: 6 n 6n + 2

Equation: An equation is two or more expressions separated by an equal sign. Examples: 4 + 5 = 9 or 4 + A = 9

Variable: A variable is a letter that represents a numbers. For example: the "A" in the example above represents the number 5.

Estimating

Estimating, or being able to make a reasonable guess and come close to a correct answer is an important part of mathematics and a very handy tool for everyday life. Get in the habit of estimating amounts of money, lengths of time, distances, and many other physical quantities. Rounding is a kind of estimating, but is more specific because you are given an exact place value spot to round to. In estimating, you still have to round, but it is usually to the nearest whole number or the the largest place value spot. Typically, when you estimate you round two or more numbers first and then preform one of the four operations (addition, subtraction, multiplication, or division).

Operations

Addition

Subtraction

Multiplication

Division