Scientific Notation makes it easy for scientists to write very LARGE and very small numbers.

Oct 6-12:41 PM

The numbers below are written in what we call
STANDARD FORM:

1,345,000,000

45

0.004391

0.01

Oct 6-12:44 PM

To take a number in standard form and express it using scientific notation, we follow the steps below:

1. Locate the decimal point

Move it to the RIGHT if the number is LESS than 1

Make sure when you move the decimal that the "new" number is greater than 1 but less than 10!

0.000458234

Move it to the LEFT if the number is GREATER than 1

246,000,000,000,000

Oct 6-12:51 PM

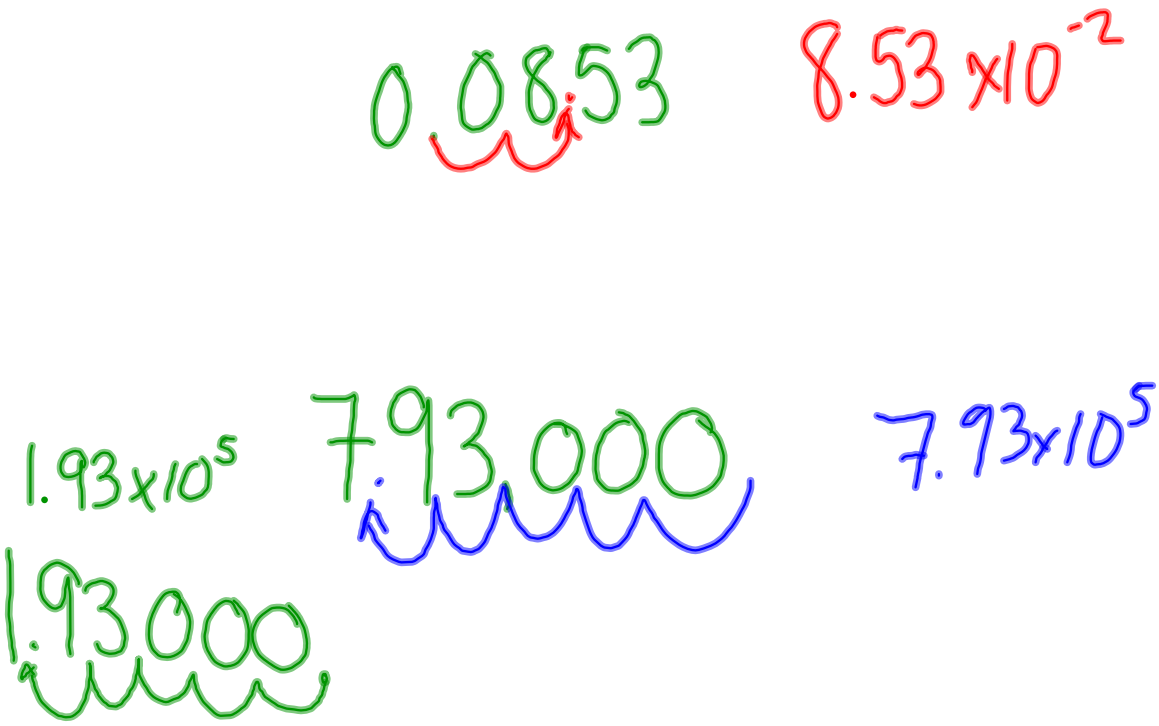
2. Place a " x 10" to the right of the number

4.58234×10^{-4}

2.46×10^{14}

3. Count the number of time the decimal was moved

That number now becomes the EXPONENT!
If you moved the decimal to the RIGHT its a NEGATIVE exponent. If you moved the decimal to the LEFT is a POSITIVE exponent.


0.0853
8.53×10^{-2}
1.93×10^{5}
7.93000
7.93×10^{5}
1.93000

Oct 6-1:04 PM

5.2 e 2

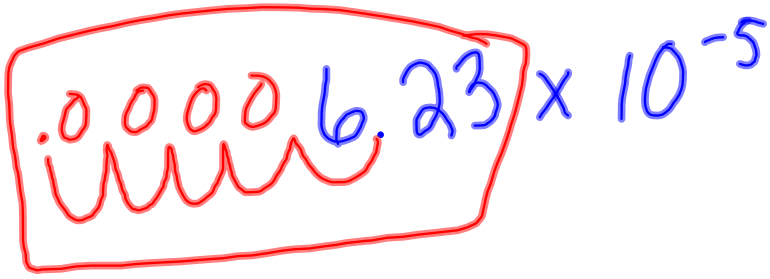
↓

x10

5.2×10^2

520

Oct 2-8:31 AM


.00006.23 x 10^-5

9.150 x 10^4