$\qquad$
$\qquad$
$\qquad$

### 0.5 Scientific Notation Notes

Scientific notation looks like this:


Examples of Scientific Notation:

Non-examples of Scientific Notation:

## Converting between Notations

Note: we are not changing the value of a number, only it's appearance.
Positive powers mean $\qquad$
Negative powers mean $\qquad$

## How to Convert Scientific Notation to Standard Notation

Always, always, always think first: " $\qquad$ ?"

Examples: $2.5 \times 10^{5}=$

$$
2.345 \times 10^{-7}=
$$

## How to Convert Standard Notation to Scientific Notation

Ask yourself " $\qquad$ ?"

After you finish the problem, look back and ask " $\qquad$ ?"

Examples: $0.0001234=$

$$
78,300=
$$

$\qquad$
$\qquad$
$\qquad$

## Calculators

Calculators are pretty nifty at sci notation, but you have to be careful!
Your calculator might look like this
 >

Take a moment to write down what your calculator looks like when you get scientific notation from it:



If you answer " 5.2 ", not only are you wrong, but you have NO IDEA HOW BIG OR SMALL YOUR ANSWER SHOULD BE!!

(Angry Mr. Newman)

Advanced tip: there's (usually) a fast way to type scientific notation in on the calculator. Draw the button here for what your calculator's "times 10 to the" button looks like:
(But on the sci notation quiz, I expect you to be able to convert \& compute without a calculator!)

