

# Itt - Day 1

## Scientific Notation

What is scientific notation?

- the combination of a number between 1 and 10 multiplied by a power of 10

Ex)  $3.2 \times 10^6$

Find the error:

$4.2^3$  ← not raised to a power of 10

$56.7 \times 10^{-3}$   
↑ not a number between 1 and 10

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Base 10 number system

Ex  $425 = 400 + 20 + 5$   
 $4 \times 10^2 + 2 \times 10^1 + 5 \times 10^0$

Practice

$708,415.26$   
↑

$7 \times 10^5 + 8 \times 10^3 + 4 \times 10^2 + 1 \times 10^1 + 5 \times 10^0 + 2 \times 10^{-1} + 6 \times 10^{-2}$

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## Adding S. N

Ex 1

$$4.2 \times 10^3 + 6.0 \times 10^2$$

$$4200 + 600 = 4800$$

$$4.8 \times 10^3$$

$$4.2 \times 10^3 + 6.0 \times 10^2$$

$$4.2 \times 10^3 + .6 \times 10^3 = 4.8 \times 10^3$$

Ex 2  $4.2 \times 10^{17} + 6.0 \times 10^{15}$

$$4.2 \times 10^{17} + .06 \times 10^{17}$$

$$4.26 \times 10^{17}$$

Ex 3

$$\begin{array}{r} 7.3 \times 10^{-4} + 2.6 \times 10^{-3} \\ .73 \times 10^{-3} \\ + 2.6 \times 10^{-3} \\ \hline 3.33 \times 10^{-3} \end{array}$$