

Multiplying & Dividing Scientific Notation

I. Multiplying

ex: $(\underline{5.4} \times 10^{-3})(\underline{2.5} \times 10^7)$

$$\begin{array}{r}
 \overset{2}{5.4} \\
 \times \overset{1}{2.5} \\
 \hline
 270 \\
 1080 \\
 \hline
 13.50
 \end{array}$$

2 #'s behind decimal

* Place decimal correctly

$10^{-3} \cdot 10^7$
 Same Base
 • Add the exponents

10^4

Combine the two answers as a # in Scientific notation.

not between one and ten

13.5×10^4
 Becoming smaller become bigger

1.35×10^5
Become Balanced

II. Division

ex:
$$\frac{(4.8 \times 10^5)}{(2.4 \times 10^2)}$$

$$\frac{4.8}{2.4} = 2$$

$$\frac{10^5}{10^2} = 10^3$$

Subtract Exponent 5

2×10^3