

8.5. S.N. cont.

March 7, 2007

Review

If the Exponent is Positive,
the Decimal Moves to the Right

If the Exponent is Negative,
the Decimal Moves to the Left

\Rightarrow S. N.

- Write the digits
- Place the decimal
- $\times 10$
- Exponent

$$\underline{3,450,000} = \underline{3.45 \times 10^6}$$

Hint: Start where you want the Decim. to go!

$$\underline{7,234,619,000} = \underline{7.234619 \times 10^9}$$

$$\underline{.00314} = \underline{3.14 \times 10^{-3}}$$

$$\underline{.000076134} = \underline{7.6134 \times 10^{-5}}$$

Review

$$\underline{(2x^4)} \underline{(3x^2)} = \underline{6x^6}$$

$$\underline{(2.3x^4)} \underline{(3.2x^3)} = \underline{7.36x^7}$$

$$\begin{array}{r} 2.3 \\ \otimes 3.2 \\ \hline 146 \\ 690 \\ \hline 7.36 \end{array}$$

$$\begin{array}{r}
 \underline{1.4} \text{ 😊}^4 \quad \underline{7.6} \text{ 😊}^3 = \underline{\underline{10.64}} \text{ 😊}^7 \\
 \begin{array}{r}
 7.4 \\
 7.6 \\
 \hline
 84 \\
 980 \\
 \hline
 \end{array}
 \end{array}$$

$$\underline{1.4} \times 10^4 \quad \underline{7.6} \times 10^3 = \underline{10.64} \times 10^7$$

😊 😊 ↗ NO!

Is this in S.N.?

$$\underline{\underline{1.064 \times 10^8}}$$

$$\underline{(2.3 \times 10^3)} \underline{(1.8 \times 10^5)}$$

$$= \underline{\underline{4.14 \times 10^8}}$$

$$\begin{array}{r} 2.3 \\ 1.8 \\ \hline 184 \\ 230 \\ \hline 4.14 \end{array}$$

$$\underline{(3.6 \times 10^4)} \underline{(1.7 \times 10^{-7})}$$

$$= \underline{\underline{6.12 \times 10^{-3}}}$$

$$\begin{array}{r} 4 \\ 3.6 \\ 1.7 \\ \hline 252 \\ 360 \\ \hline 6.12 \end{array}$$

Review

$$\frac{2a^5}{8a^3} = \frac{1}{4}a^2 = \underline{\underline{.25a^2}}$$

$$\frac{1.2 \times 10^5}{4.8 \times 10^2} = \underline{\underline{0.25}} \times 10^3$$
$$= \underline{\underline{2.5}} \times 10^2$$

$$\frac{5.2 \times 10^3}{1.3 \times 10^1} = \underline{\underline{4 \times 10^2}}$$

$$\frac{1.3 \times 10^{-1}}{6.5 \times 10^{-4}} = 0.2 \times 10^3 = \underline{\underline{2. \times 10^2}}$$

→ S.N.
Always...^{S.N.} where you want the
Decim. to go & Move to where it is.

O.T.L.

① Pg 472-473: 35-51 (odd)

② Ch. 8. S.N. Quest Friday!