

HW: Scientific Notation Operations Worksheet

Warm up:No Calculator

Evaluate without using a calculator.

$$1) 5.6 \times 4.2 =$$

$$\begin{array}{r} 5.6 \\ \times 4.2 \\ \hline 112 \\ 2240 \\ \hline 2352 \end{array}$$

$$2) 2.085 \times 8.6 =$$

$$\begin{array}{r} 2.085 \\ \times 8.6 \\ \hline 12510 \\ 166800 \\ \hline 179310 \end{array}$$

$$3) 15.66 / 2.7 =$$

$$2.7 \overline{) 15.66}$$

$$\begin{array}{r} 5.8 \\ 27 \overline{) 156.6} \\ \underline{-135} \\ 216 \\ \underline{-216} \\ 0 \end{array}$$

$$\begin{array}{r} 3 \\ \times 27 \\ \hline 135 \end{array}$$

$$\begin{array}{r} 5 \\ \times 27 \\ \hline 216 \end{array}$$

How to divide decimals...

$$\begin{array}{r} 17.64 \\ \hline 6.3 \end{array}$$

$$\begin{array}{r} 3.204 \\ \hline 7.2 \end{array}$$

$$7.2 \overline{) 3.204}$$

0.445

$$\begin{array}{r} 72 \overline{) 32040} \\ \underline{-288} \\ 252 \\ \underline{-288} \\ 360 \\ \underline{-360} \\ 0 \end{array}$$

$$\begin{array}{r} 72 \\ \times 3 \\ \hline 216 \end{array} \quad \begin{array}{r} 72 \\ \times 4 \\ \hline 288 \end{array}$$

$$(5.65 \times 10^{-3})(2.2 \times 10^8)$$
$$\begin{array}{r} 5.65 \\ \times 2.2 \\ \hline 1130 \\ 11300 \\ \hline 12430 \end{array}$$
$$12.43 \times 10^5$$
$$\underline{1.243 \times 10^6}$$

$$\begin{array}{r} 24 \overline{) 7.44} \\ \underline{3.1} \\ 24 \overline{) 74.4} \\ \underline{-72} \downarrow \\ 24 \\ \underline{-24} \\ 0 \end{array}$$

$$7.44 \times 10^6$$

$$2.4 \times 10^{-2}$$

$$3.1 \times 10^8$$

$$\begin{array}{l} 6 - (-2) \\ 6 + 2 \\ 8 \end{array}$$

$$\frac{2.3828 \times 10^7}{2.8 \times 10^3}$$

$$2.8 \times 10^3$$

$$\begin{array}{r} .851 \\ 28 \overline{) 23.828} \\ \underline{-224} \\ 142 \\ \underline{-140} \\ 28 \\ \underline{-28} \\ 0 \end{array}$$

$$0.851 \times 10^4$$

$$8.51 \times 10^3$$

$$\begin{array}{r} 7 \\ 28 \\ \times 9 \\ \hline 252 \end{array}$$

$$\begin{array}{r} 6 \\ 28 \\ \times 8 \\ \hline 224 \end{array}$$

$$\begin{array}{r} 4 \\ 28 \\ \times 5 \\ \hline 140 \end{array} \quad \begin{array}{r} 4 \\ 28 \\ \times 6 \\ \hline 168 \end{array}$$

1) $(5.78 \times 10^{-7})(3 \times 10^2)$	5) $\frac{2.87 \times 10^{-8}}{8.2 \times 10^{-2}}$
2) $(8.2 \times 10^{-5})(1.63 \times 10^{-6})$	
3) $4.02(3.9 \times 10^{-8})$	6) $\frac{4.56 \times 10^4}{1.2 \times 10^{-5}}$
4) $\frac{1.512 \times 10^5}{4.2 \times 10^2}$	

$$1) (5.78 \times 10^{-7})(3 \times 10^2)$$

$$\begin{array}{r} 2 \quad 2 \\ 5.78 \\ \times \quad 3 \\ \hline 17.34 \end{array}$$

$$17.34 \times 10^{-5}$$
$$\textcircled{1.734 \times 10^{-4}}$$

$$2) (8.2 \times 10^{-5})(1.63 \times 10^{-6})$$

$$\begin{array}{r} \overset{5}{5} \overset{1}{1} \overset{2}{2} \\ 1.63 \\ \times 8.2 \\ \hline 326 \\ 13040 \\ \hline 13366 \end{array}$$

$$13.366 \times 10^{-11}$$
$$1.3366 \times 10^{-10}$$

$$3) 4.02(3.9 \times 10^{-8})$$

$$\begin{array}{r} 4.02 \\ \times 3.9 \\ \hline 3618 \\ 12060 \\ \hline 15.678 \end{array}$$

$$15.678 \times 10^{-8}$$
$$1.5678 \times 10^{-7}$$

$$4) \frac{1.512 \times 10^5}{4.2 \times 10^2}$$

$$5) \frac{2.87 \times 10^{-8}}{8.2 \times 10^{-2}}$$

$$6) \frac{4.56 \times 10^4}{1.2 \times 10^{-5}}$$

Scientific Notation on a Calculator

