

Chemistry 120
Significant Figures Worksheet

For each of the following, fill in the blank with the appropriate answer to the correct number of significant figures. In multi-step problems, show the non-significant figures you are carrying forward by one of the methods shown in class. Answers are given at the end of this worksheet.

1. $\begin{array}{r} 134.991 \\ + 42.11 \\ \hline \end{array}$ 2. $\begin{array}{r} 134.991 \\ - 42.11 \\ \hline \end{array}$ 3. $\begin{array}{r} 134.991 \\ \times 42.11 \\ \hline \end{array}$ 4. $\frac{134.991}{42.11} =$

5. $\begin{array}{r} 1.37 \times 10^{-3} \\ + 5.89 \times 10^{-5} \\ \hline \end{array}$ 6. $\begin{array}{r} 1.37 \times 10^{-3} \\ - 5.89 \times 10^{-5} \\ \hline \end{array}$ 7. $\begin{array}{r} 1.37 \times 10^{-3} \\ \times 5.89 \times 10^{-5} \\ \hline \end{array}$ 8. $\frac{1.37 \times 10^{-3}}{5.89 \times 10^{-5}} =$

9. $\frac{(888.300 + 31.019)}{1.344 \times 10^4} = \frac{\quad}{1.344 \times 10^4} =$ 10. $\frac{e\sqrt{2.00}}{\pi} = \frac{e \times \quad}{\pi} =$

11. $\frac{(3.03 \times 10^{-8} - 3.019 \times 10^{-9})}{1.4004 \times 10^4} = \frac{\quad}{1.4004 \times 10^4} =$

12. $\frac{136000. \times 0.000322 \times 273.15}{0.082 \times 4200. \times 129.2} =$ 13. $63.54 \left(\frac{3.22 \times 10^{24}}{6.022 \times 10^{23}} \right) =$

14. $\sqrt{\frac{(0.0158 + 1.003)}{1.777 \times 10^{-3}}} = \sqrt{\frac{\quad}{1.777 \times 10^{-3}}} =$