

Calculations with Sig Figs: Multiplication & Division

Multiplication and Division: Perform each calculation and round to the proper number of significant figures.

- *Step 1 - Identify the number of SF in each value using the Atlantic-Pacific Rule*
- *Step 2 - Type the values into the calculator and compute*
- *Step 3 - Round your final answer to the same number of SF as the value with the least number of SF*

Mathematical Calculation to Perform	# of SF in each quantity	Calculated Answer	Answer Rounded to Correct # of SF
400.0×0.04	4, 1	16	20
$2300 \div 80.00$			
17.40×0.500			
$900 \div 0.43$			
$0.060 \times 0.00250 \times 70.30$			
$4500 \times 70.0 \div 7.006$			
$40030 \times 70.00 \div 0.000046$			

Sig Fig Calculations: Addition & Subtraction

Addition and Subtraction: Perform each calculation and round to the proper number of significant figures.

- *Step 1 – Write each quantity in a vertical column, taking care to line up the decimals*
- *Step 2 – Does every number in the quantities being calculated have a SF after the decimal?*
 - *Yes? Final answer is rounded to the same decimal place as the quantity with the fewest number of SF after the decimal. (Example: One quantity has one place after the decimal, the other has three places after the decimal. Final answer should be rounded to one place after the decimal.)*
 - *No? Final answer is rounded to the last digit before the decimal (the one's position).*

Mathematical Calculation to Perform	Place numbers in vertical column, lining up decimals	Calculated Answer	Answer Rounded to Correct # of SF
400.0 + 0.04	$ \begin{array}{r} 400.0 \\ + \quad 0.04 \\ \hline \end{array} $	400.04	400.0
95.0. - 80.00			
17.40 + 0.500			
43 + 70.00 - 0.046			