



Chem Skills Worksheet #4: Significant Figures Calculations

A. Complete the multiplication or division problem and provide the final answer with the correct number of significant figures

	Problem	Calculator Answer	Answer Rounded to the correct number of significant figures
1.	$2.698 \times 33.20 \times 1.5611$	124.2848	124.28
2.	$8.032 / 0.591$		
3.	$(3.2 \times 10^3) (4.21 \times 10^2)$	1347200	1.3×10^6
4.	$(2.5000 \times 10^6) (3.92 \times 10^{-3})$		
5.	3×154	462	5×10^2
6.	3.00×154		
7.	$1.65 \times 10^2 / (2.3456 \times 10^3)$.0703	.0703 or 7.03×10^{-2}
8.	32.21000×3.540000		
9.	$5.5 \times 10^5 / 3.3 \times 10^3$	166.6667	1.7×10^2
10.	$2.5 \times 2.34 \times 3.6543$		

B. Complete the addition or subtraction problem and provide the final answer with the correct number of significant figures.

	Problem	Calculator Answer	Answer Rounded to the correct number of places past the decimal
11.	$7.623 + 85.0 + 9.815$	102.4380	102.4
12.	$230.72 + 0.00861$		
13.	$10.96 - 5.5$	5.4600	5.5
14.	$10.96 - 5.555$		
15.	$9.0731 + 0.00078$	9.0739	9.0739
16.	$23.6 - 16.1218$		
17.	$21.5 - 2.5 + 5.5555$	29.5555	29.6
18.	$32.21000 + 3.540000$		
19.	$5.5 - 3.325$	2.1750	2.2
20.	$2.5 + 2.34 + 3.6543$		

C. Complete the indicated operation and provide the final answer with the correct number of significant figures and proper units.

	Problem	Calculator Answer	How many sig figs or places past the decimal?	Rounded answer with units
21.	$0.00598 \text{ mm} + 0.004 \text{ mm}$.0100	3 places	.010 mm
22.	$79.6 \text{ mL} + 0.0168 \text{ mL}$			
23.	$27 \text{ L} - 0.0838 \text{ L}$	26.9162	0 places	27 L
24.	$420 \text{ cm} - 19.11 \text{ cm}$			
25.	$6.77 \text{ kg} \times 0.9 \text{ kg}$	6.0930	1 sig fig	6 Kg ²
26.	$16.2 \text{ mL} \times 23.79 \text{ mL}$			
27.	$596,000 \text{ mg} \div 0.0023 \text{ mg}$	259130434.8	2 sig fig	2.6×10
28.	$56.200 \text{ g} \div 260.5 \text{ g}$			
29.	$23 \text{ L} + 1.59 \text{ L} - 3.01 \text{ L}$	21.580	0 places	22L
30.	$21.4 \text{ km} \times 0.569 \text{ km} \div 0.9 \text{ Km}$			

Name _____ Date _____ Period _____

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