

Significant Figures Worksheet Key

1. Indicate how many significant figures there are in each of the following measured values.

246.32	<u>5 sig figs</u>	1.008	<u>4 sig figs</u>	700000	<u>1 sig fig</u>
107.854	<u>6 sig figs</u>	0.00340	<u>3 sig figs</u>	350.670	<u>6 sig figs</u>
100.3	<u>4 sig figs</u>	14.600	<u>5 sig figs</u>	1.0000	<u>5 sig figs</u>
0.678	<u>3 sig figs</u>	0.0001	<u>1 sig fig</u>	320001	<u>6 sig figs</u>

2. Calculate the answers to the appropriate number of significant figures.

$$\begin{array}{r} 32.567 \\ 135.0 \\ + 1.4567 \\ \hline 169.0 \end{array}$$

$$\begin{array}{r} 246.24 \\ 238.278 \\ + 98.3 \\ \hline 582.8 \end{array}$$

$$\begin{array}{r} 658.0 \\ 23.5478 \\ + 1345.29 \\ \hline 2026.8 \end{array}$$

3. Calculate the answers to the appropriate number of significant figures.

- | | | | |
|-----------------------------------|---------------|-------------------------|--|
| a) 23.7×3.8 | = <u>90.</u> | e) 43.678×64.1 | = <u>2.80×10^3</u> |
| b) 45.76×0.25 | = <u>11</u> | f) $1.678 / 0.42$ | = <u>4.0</u> |
| c) $81.04 \text{ g} \times 0.010$ | = <u>0.81</u> | g) $28.367 / 3.74$ | = <u>7.58</u> |
| d) 6.47×64.5 | = <u>417</u> | h) $4278 / 1.006$ | = <u>4252</u> |