

Significant Figures Worksheet

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

246.32	_____	1.008	_____	700000	_____
107.854	_____	0.00340	_____	350.670	_____
100.3	_____	14.600	_____	1.0000	_____
0.678	_____	0.0001	_____	320001	_____

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

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

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

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

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

a) $23.7 \times 3.8 =$ _____ e) $43.678 \times 64.1 =$ _____

b) $45.76 \times 0.25 =$ _____ f) $1.678 / 0.42 =$ _____

c) $81.04 \times 0.010 =$ _____ g) $28.367 / 3.74 =$ _____

d) $6.47 \times 64.5 =$ _____ h) $4278 / 1.006 =$ _____

Significant Figures Worksheet Key

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

246.32 5 sig figs 1.008 4 sig figs 700000 1 sig fig

107.854 6 sig figs 0.00340 3 sig figs 350.670 6 sig figs

100.3 4 sig figs 14.600 5 sig figs 1.0000 5 sig figs

0.678 3 sig figs 0.0001 1 sig fig 320001 6 sig figs

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

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

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

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

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

a) $23.7 \times 3.8 = \mathbf{90.}$

e) $43.678 \times 64.1 = \mathbf{2.80 \times 10^3}$

b) $45.76 \times 0.25 = \mathbf{11}$

f) $1.678 / 0.42 = \mathbf{4.0}$

c) $81.04 \text{ g} \times 0.010 = \mathbf{0.81}$

g) $28.367 / 3.74 = \mathbf{7.58}$

d) $6.47 \times 64.5 = \mathbf{417}$

h) $4278 / 1.006 = \mathbf{4252}$