

Significant Figure Worksheet.

1. Indicate the number of significant figures for each of the measurements.

37.2m	<u>3</u>	56cm	<u>2</u>	0.0000076s	<u>2</u>
0.80kg	<u>2</u>	3015kg	<u>4</u>	789mm	<u>3</u>
56.02m	<u>4</u>	$4.24 \times 10^3 m$	<u>3</u>	5.00cm	<u>3</u>
$2.999 \times 10^6 m/s$	<u>4</u>	$9.7 \times 10^{-10} m$	<u>2</u>	0.00015g	<u>2</u>
0.050m	<u>2</u>	5.6×10^2	<u>2</u>	104.080J	<u>6</u>

2. Calculate the answer and express to the correct number of significant figures. Use scientific notation.

400.87	$37.2 + 0.12 + 363.55 = 4.009 \times 10^2$	$362.66 - 29.2 = 3.33 \times 10^2$	333.46
3680.08	$4005.34 - 325.2600 = 3680.08 \times 10^3$	$0.00076 - 0.00060000 = 1.6 \times 10^{-4}$	0.00016
14.4	$2.4 \times 6.0 = 1.4 \times 10^1$	$0.23 \times 0.350 \times 4 = 3. \times 10^{-1}$	0.322
9682.2	$55 \times 0.540 \times 326 = 9.7 \times 10^3$	$0.0060 \times 55.1 \times 26 = 8.6 \times 10^0$	8.5956
23.96166...	$750/31.3 = 2.4 \times 10^1$	$(0.094) \times (720) - 4.4 = 6.3 \times 10^1$	63.28

3. Scientific notation is an expression of the type $\overset{67.68}{N} \times 10^n$ where N is greater than 1 and less than 10 ($1 \leq N < 10$).

For example 5,190,000 is expressed as 5.19×10^6 .