Significant Figures Worksheet Solutions

Determine the number of significant figures in the following numbers?

71 ___2____	6.738×10^{-9} ___4____	0.080702 __5_____
5651.00 ___6____	110___2____	3.645×10^{-6} ____4___
78402 ___5____	23.0 __3_____	101.0__4_____
96.00 __4_____	0.009007__4_____	0.00334__3_____
0.0308___3____	6.217×10^{1}___4____	9.3363×10^{-2}___5____
135.90 ____5____	0.040 _____2___	6.02×10^{23} ____3____
7500 ____2____	0.602100 ___6_____	5×10^{15}____1____

Rewrite the numbers above representing the requested number of sig figs

(1) ___70____	(3) ____6.74×10^{-9}___	(4) __0.08070_____
(2) ___5700____	(1) __100_____	(1) ___4×10^{-6}____
(4) __7.840×10^{4}__	(2) ___23____	(1) ___100____
(3) __96.0_____	(1) __0.009_____	(2) __0.0033_____
(2) __0.031_____	(2) __6.2×10^{1}_____	(3) _9.34×10^{-2}_____
(2) ___140_____	(1) ____0.04____	(2) ____6.0×10^{23}____
(1) ___8000_____	(2) ____0.60____	(1) ____5×10^{15}____

When collecting data, the rule is that you must express your answer to one decimal place past the actual accuracy of the measuring device.

The mass of the sugar is accurate. The errors caused by the balance cancel out because they are present in both measurements.

It is important to use the correct number of significant digits when expressing measurements to keep us from communicating more accuracy in our measurements than are offered by our measurement devices.