## Scientific Notation/Significant Figures Worksheet Answers

1. Convert each of the following into scientific notation.
$7.27 \times 10^{2}$
$1.72000 \times 10^{5}$
$9.84 \times 10^{-4}$
$2.000 \times 10^{4}$
1.4
$2.560 \times 10^{33}$
2. Convert each into decimal form.
$15600 \pm 100$
0.036
$73690000 \pm 10000$
$590 \pm 10$
0.000059
3. Calculate the following. Give the answer in correct scientific notation.
a) $9.434 \times 10^{66}$
b) $-8.87 \times 10^{2}$
4. Calculate the following. Give the answer in correct scientific notation.
a) $7.16 \times 10^{20}$
b) $1.1025 \times 10^{130}$
5. Give the number of significant figures in each of the following.
a) $1.05 \mathrm{~g} \quad \underline{3}$
b) $\mathbf{0 . 0 0 0 3 0 4 0} \mathrm{mm} \quad \underline{4}$
c) $\mathbf{2 9 0 0 0} \pm \mathbf{1 0 ~ f t} \quad \underline{4}$
d) $0.90 \times 10^{45} \mathrm{~L} \quad \underline{2}$
e) the number of eggs (12) that make up a dozen infinite
6. Determine the answer for each of the following. Be sure to use the correct number of significant figures.
a) 45.3
b) 5.04
c) $9.9 \times 10^{3}$
d) 3
7. Round each of the following to 3 significant figures.
77.1
0.000234
$2.90 \times 10^{21}$
$6.30 \times 10^{6}$
10.2
