

Scientific Notation & Significant Figures Worksheet

Take the following out of Scientific Notation:

- 1) 5.2×10^3
- 3) 6.452×10^2
- 2) 9.65×10^{-4}
- 4) 8.77×10^{-1}

Express the following in Scientific Notation:

- 5) 78,000
- 7) 2,687
- 6) 0.00053
- 8) 0.012654

Solve the following:

- 9) $(1.2 \times 10^5) + (5.35 \times 10^6)$
- 10) $(6.91 \times 10^{-2}) + (2.4 \times 10^{-3})$
- 11) $(3.67 \times 10^2) - (1.6 \times 10^1)$
- 12) $(8.41 \times 10^{-5}) - (7.9 \times 10^{-6})$
- 13) $(4.3 \times 10^8) \times (2.0 \times 10^6)$
- 14) $(1.5 \times 10^{-2}) \times (8.0 \times 10^{-1})$
- 15) a) $\frac{7.8 \times 10^3}{1.2 \times 10^4}$ b) $\frac{8.1 \times 10^{-2}}{9.0 \times 10^2}$

Determine the number of significant figures in:

- 1) 804.05
- 4) 400
- 2) 0.0144030
- 5) 30,000.
- 3) 1002
- 6) 0.000625000

7) Report the number “seven thousand” with the following amounts of significant figures:
a) 1 sig fig b) 4 sig figs c) 6 sig figs

Round the following to the # of sig figs indicated:

- 8) Round 2.6765 to two sig figs.
- 9) Round 52.8005 to five sig figs.

Solve the following:

- 10) $(7.31 \times 10^4) + (3.23 \times 10^3)$
- 11) $(8.54 \times 10^{-3}) \times (3.4 \times 10^{-4})$
- 12) $3873.6 / 47.84$
- 13) $4.78 + 3.218 + 5.82$
- 14) $3.40 + 7.34 - 6.45$
- 15) $(0.1285 \times 38.00) / (0.08206 \times 255)$