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Significant Figures and Scientific Notation Worksheet **WITH ANSWERS**

State how many significant figures are in the numbers below.

- 1) 0.013 2
- 2) 2450 3
- 3) 780.0 4
- 4) 96000 2
- 5) 0.05780 4

Create a number below that is 4 significant figures and has a decimal in it.

Give the answer with the correct significant figures for the problems below.

- 1) $96.4 + 53 = 149$
- 2) $0.837 - 0.0039 = 0.833$
- 3) $6790 + 82.1 - 15700 + 30.4 = -8800$
- 4) $0.008 + 720 = 720$
- 5) $69.3 - 75.624 = -6.3$

- 6) $45 * 62.1 = 2800$
- 7) $3724 * 900 = 3000000$
- 8) $0.00105 / 0.007639 = 0.137$
- 9) $(763 * 159) / (20 * 348) = 20$
- 10) $(0.00840 * 0.01209) / 0.0006573 = 0.155$

Put these numbers in scientific notation

- 1) 59000 $5.9 * 10^4$
- 2) 0.0014 $1.4 * 10^{-3}$
- 3) 9340000000 $9.34 * 10^9$
- 4) 0.00000318 $3.18 * 10^{-6}$
- 5) 10 $1.0 * 10^1$

Write the regular number from the scientific notation below.

- 1) $3.5 * 10^3$ 3500
- 2) $7.9 * 10^{-4}$ 0.00079
- 3) $4 * 10^1$ 40
- 4) $1.72 * 10^{-7}$ 0.000000172
- 5) $8.38 * 10^9$ 8380000000

Solve the multiplication and division problems below.

- 1) $(3.2 * 10^3) (4.5 * 10^2)$ = $1.44 * 10^6$
- 2) $\frac{1.7 * 10^5}{6.9 * 10^4}$ = 2.46
- 3) $\frac{(7.8 * 10^{-3}) (6.2 * 10^{-4})}{9.4 * 10^{-5}}$ = $5.14 * 10^{-2}$
- 4) $\frac{(2.5 * 10^{-7}) (4.9 * 10^5)}{(7.3 * 10^8) (9.1 * 10^{-6})}$ = $1.84 * 10^{-5}$

