

Name _____ Date _____ Period _____

Scientific Notation Worksheet

Do the following problems without the use of a calculator.

Mental Math practice - No calculator!

Convert the following numbers to scientific notation: Example: $5,347,345 = 5.347345 \times 10^6$

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|--------------------|------------------|
| _____ 1. 467.994 | _____ 6. 0.00312 |
| _____ 2. 103,700 | _____ 7. 12.44 |
| _____ 3. 0.0009450 | _____ 8. 9.347 |
| _____ 4. 0.0775 | _____ 9. 1,045 |
| _____ 5. 134.50 | _____ 10. 0.9901 |

Expand the following scientific notation into regular notation: Example: $5.347 \times 10^2 = 534.7$

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|----------------------------------|-------------------------------|
| _____ 1. 5.543×10^{-2} | _____ 6. 1.773×10^3 |
| _____ 2. 9.002×10^7 | _____ 7. 6.88×10^0 |
| _____ 3. 4×10^5 | _____ 8. 4.3×10^{-4} |
| _____ 4. 1.1111×10^{-6} | _____ 9. 5.58×10^2 |
| _____ 5. 6×10^{-4} | _____ 10. 7.657×10^1 |

Change the following incorrect scientific notation into correct scientific notation:

Example: $4,378 \times 10^2 = 4.378 \times 10^5$

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|------------------------------------|---------------------------------|
| _____ 1. 0.0001348×10^3 | _____ 6. 0.125×10^2 |
| _____ 2. 0.0472×10^{-4} | _____ 7. 12.5×10^{-1} |
| _____ 3. $4,597.3 \times 10^0$ | _____ 8. 356.7×10^5 |
| _____ 4. 31.673×10^{-3} | _____ 9. 689×10^4 |
| _____ 5. 0.002002×10^{-1} | _____ 10. 8443×10^{-5} |

Do the following problems and express your answer in correct scientific notation:

Example: $(5 \times 10^5)(2 \times 10^7) = 10 \times 10^{12} = 1.0 \times 10^{13}$ (Watch the operation!)

- | |
|---|
| _____ 1. $(3 \times 10^2)(2 \times 10^3)$ |
| _____ 2. $(10 \times 10^6) / (2 \times 10^2)$ |
| _____ 3. $(5 \times 10^{-2})(6 \times 10^4)$ |
| _____ 4. $(9 \times 10^{-4}) / (2 \times 10^3)$ |
| _____ 5. $\frac{(4 \times 10^5)(7 \times 10^{-3})}{(1.4 \times 10^{-6})}$ |