Name_____ Date_____

Mrs. Roumbos 8R Period_____

Multiplying & Dividing Scientific Numbers

I. Steps:

a) _____ the coefficients

b) _____ the powers of ten

c) Multiply or Divide the coefficients.

d) _____the powers of ten by: _____ the exponents ***or*** _____ the powers of ten by:_____the exponents.

e) Make Sure your final answer is in _____ _____.

** **Exponents don't have to be the same****

** If you move the decimal point one place to the right, you subtract one number from the exponent (If you make the coefficient bigger, make the exponent smaller)

** If you move the decimal point one place to the left, you add one number to the exponent (If you make the coefficient smaller, make the exponent bigger)

II. Examples: Perform the indicated operation. Write your answer in scientific notation.

1) $\left(4.84x10^{11}\right)\div\left(8.8x10^{4}\right)$	2) $\left(8.9x10^{7}\right)\bullet\left(9.8x10^{10}\right)$

3) $\frac{(2.21x10^{9})}{(2.6x10^{3})}$	4) $(6.3x10^{31})(3.5x10^{13})$
5) $(1.44x10^{13})\bullet(2.5x10^{2})$	6) $(2.66x10^{10})\div(9.5x10^{5})$
7) $(2.2x10^{2})(4.55x10^{12})$	8) $\frac{(2.42x10^{10})}{(5.5x10^{4})}$