Adding or Subtracting with Scientific Notation

In order to add or subtract numbers in scientific notation, the exponents in the numbers with base 10 have to be the same.

Procedure – To add or subtract numbers in scientific notation

- 1. Rewrite numbers with base 10 with the same exponent and move the decimal points with the numbers
- 2. Add the decimals
- 3. Write the answer in scientific notation

Example

$$(1.23 \times 10^5) + (3.4 \times 10^4)$$

- 1. $(1.23 \times 10^5) + (.34 \times 10^5)$
- 2. 1.23 + .34 = 1.57
- 3. 1.57×10^5

I could have changed the exponent in the first number n that example.