CONCEPT: ADDITION AND SUBTRACTION

When you add or subtract values in scientific notation they must have the same exponents. The coefficients add or subtract, but the exponents _____.

$$A \times 10^x$$
$$\underline{-\,B \times 10^x}$$
$$(A - B) \times 10^x$$

$$A \times 10^x$$
$$\underline{+\,B \times 10^x}$$
$$(A + B) \times 10^x$$

- If the exponents are not the same then we transform the _____ value so that they do.

- Remember when adding or subtracting values that the final answer must have the _____.

EXAMPLE 1: Using the method discussed above, determine the answer to the following question.

$$8.17 \times 10^8$$
$$\underline{+\,1.25 \times 10^9}$$

EXAMPLE 2: Using the method discussed above, determine the answer to the following question.

$$9.08 \times 10^{-11}$$
$$-1.17 \times 10^{-12}$$
$$\underline{-\,3.35 \times 10^{-13}}$$