

**Scientific Notation Addition and Subtraction - Guided Lesson Explanation****Explanation#1**

$$\begin{aligned} & 11 \times 10^4 + 7.8 \times 10^5 && \text{(Get all exponents on the same level)} \\ = & 1.1 \times 10^5 + 7.8 \times 10^5 && \text{Sliding the decimal to the left increases} \\ = & (1.1 + 7.8) \times 10^5 && \text{the exponent. Now find the sum.} \\ = & 7.91 \times 10^5 \end{aligned}$$

**Explanation#2**

$$\begin{aligned} & 4 \times 10^3 - 2.5 \times 10^2 && \text{You can also convert the numbers} \\ = & 4000 - 250 && \text{to standard form when it suits you.} \\ = & 3,750 \\ = & 3.75 \times 10^3 && \text{You would need to convert it back.} \end{aligned}$$

**Explanation#3**

$$\begin{aligned} & 7 \times 10^4 - 5.5 \times 10^3 && \text{Here again the numbers can easily go} \\ = & 70,000 - 550 && \text{into standard form.} \\ = & 69,450 \\ = & 69.45 \times 10^4 && \text{We convert it back to Sci. Notation} \end{aligned}$$

