

Adding and Subtracting in Scientific Notation

First, make the powers of ten match by
 keeping it going $(+)$ or bringing it back $(-)$

Then, add or subtract the decimals

Fix the scientific notation if you need to

$$\begin{aligned}
 a.) \quad & (1.2 \times 10^4) + (3.4 \times 10^3) \\
 & (12 \times 10^3) + (3.4 \times 10^3) \\
 & = 15.4 \times 10^{3+1} \\
 & = 1.54 \times 10^4
 \end{aligned}$$

$$(6.3 \times 10^{20}) + (1.2 \times 10^{21})^1$$

$$6.3 \times \underline{10^{20}} + 12 \times \underline{10^{20}}$$

$$18.3 \times 10^{20+1}$$

$$1.83 \times 10^{21}$$

$$(9.8 \times 10^5) - (3.4 \times 10^2)^3$$

$$9.8 \times \underline{10^5} - 0.0034 \times \underline{10^5}$$

$$9.7966 \times 10^5$$