Equations in \LaTeX

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Here is how to write equations to show your dimensional analysis skills. The first equation, (1), is simple. You could also write something short like this in your current paragraph. This is how you do that: $5 + 10 = 15$. You have to put $\$ signs around it. The second, (2), shows how to do fractions. The third, (3), is to show how to deal with squared terms. It is rewritten as (4) to further illustrate how to deal with squared terms. As usual with \LaTeX, if you don’t understand how something works, try changing it, or Google it.

\begin{equation}
5 + 10 = 15 \tag{1}
\end{equation}

\begin{equation}
5.0 \text{ ft} \times \frac{12 \text{ in}}{1 \text{ ft}} \times \frac{2.54 \text{ cm}}{1 \text{ in}} = 150 \text{ cm} \tag{2}
\end{equation}

\begin{equation}
100 \text{ acres} \times \frac{\frac{1}{5280} \text{ mile}^2}{1 \text{ acre}} \times \frac{(5280 \text{ ft})^2}{(1 \text{ mile})^2} \times \frac{(1 \text{ m})^2}{(3.2808 \text{ ft})^2} \times \frac{1 \text{ ha}}{10^4 \text{ m}^2} = 40 \text{ ha} \tag{3}
\end{equation}

\begin{equation}
100 \text{ acres} \times \frac{\frac{1}{640} \text{ mile}^2}{1 \text{ acre}} \times \frac{27,878,400 \text{ ft}^2}{1 \text{ mile}^2} \times \frac{1 \text{ m}^2}{10.76 \text{ ft}^2} \times \frac{1 \text{ ha}}{100 \text{ m} \times 100 \text{ m}} = 40 \text{ ha} \tag{4}
\end{equation}