

Data Analysis Handout

Percent Error

A percent error is used to compare a theoretical value to an experimental value.

$$\% \text{ error} = \frac{|\text{Theoretical value} - \text{Experimental value}|}{\text{Theoretical value}} * 100\%$$

****Unless instructed otherwise, the percent error value has to be equal or less than 10 %**

Percent Difference

A percent difference is used when two experimental values are compared and a theoretical value is not available.

$$\% \text{ difference} = \frac{|\text{Exp.Value}(1) - \text{Exp.Value}(2)|}{\frac{\text{Exp.Value}(1) + \text{Exp.value}(2)}{2}} * 100\%$$

****Unless instructed otherwise, the percent difference value has to be equal or less than 10 %**