Units and Measurements

Mean absolute error: $\Delta a_{mean} =$	$\frac{\lvert\Delta a_1\rvert + \lvert\Delta a_2\rvert + \ldots + \lvert\Delta a_n\rvert}{n}$
Absolute error for fractional error:	$\frac{\Delta a_{mean}}{a_{mean}}$
Percentage error:	$\left(\frac{\Delta a_{mean}}{a_{mean}}\right) \times 100\%$

Kinematics

Speed	$\frac{Distance}{Time}$
Average speed	$= \frac{Total\ Distance}{Total\ Time} = \frac{x_1 + x_2 + x_3 + \ldots}{t_1 + t_2 + t_3 + \ldots}$
Instantaneous speed	$v = \lim_{\Delta s \to 0} \left(\frac{\Delta s}{\Delta t}\right) = \frac{ds}{dt}$
Velocity	$\frac{displacement}{time}$
Average velocity	$\frac{Displacement}{Total\ Time} = \frac{v+u}{2}$
Acceleration: $a =$	$\frac{Chnage\ in\ velocity}{Time} = \frac{v-u}{t}$
Average acceleration $a_{avg} =$	$\frac{\Delta v}{\Delta t}$
Instantaneous acceleration $a =$	$\lim_{\Delta t \to 0} \left(\frac{\Delta v}{\Delta t}\right) = \frac{dv}{dt}$