The following are always true:

$v_x = dx/dt, \quad v_{av-x} = (x_2 - x_1)/(t_2 - t_1)$
$a_x = dv_x/dt, \quad a_{av-x} = (v_{2x} - v_{1x})/(t_2 - t_1)$
$x(t) = x_0 + \int_0^t v_x(t)\, dt$
$v_x(t) = v_{0x} + \int_0^t a_x(t)\, dt$
$\vec{\mathbf{v}} = d\vec{\mathbf{r}}/dt$
$\vec{\mathbf{a}} = d\vec{\mathbf{v}}/dt$

The following apply for constant acceleration:

$x = x_0 + v_{0x}t + \frac{1}{2}a_x t^2$
$v_x(t) = v_{0x} + a_x t$
$v_x(t)^2 = v_{0x}^2 + 2a_x \Delta x$
$\Delta x = \frac{v_{0x} + v_x(t)}{2} t$
$\vec{\mathbf{r}} = \vec{\mathbf{r}}_0 + \vec{\mathbf{v}}_0 t + \frac{1}{2}\vec{\mathbf{a}}t^2$
$\vec{\mathbf{v}} = \vec{\mathbf{v}}_0 + \vec{\mathbf{a}}t$

Vectors:

$\vec{\mathbf{A}} = A_x\hat{\mathbf{i}} + A_y\hat{\mathbf{j}} + A_z\hat{\mathbf{k}}$
$A_x = A\cos\theta, \quad A_y = A\sin\theta$
$A = \sqrt{A_x^2 + A_y^2}, \quad \tan\theta = A_y/A_x$

Other equations:

$a_{rad} = v^2/R = 4\pi^2 R/T^2$
$\vec{\mathbf{v}}_{P/A} = \vec{\mathbf{v}}_{P/B} + \vec{\mathbf{v}}_{B/A}$

Some constants:

$g = 9.80$ m/s^2, $\quad 1$ hr $= 3600$ s, $\quad 1$ km/hr $= 0.278$ m/s

Some mathematical formulae:

If $at^2 + bt + c = 0$, then $t = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$.
If $x = at^n$, then $dx/dt = nat^{n-1}$.
If $x = at^n$, then $\int_{t_1}^{t_2} x(t)\, dt = \frac{a}{n+1}\left(t_2^{n+1} - t_1^{n+1}\right)$.