Uniform motion $v = cte,\ a = 0$	$x = x_0 + v \cdot t$	
Uniformly accelerated motion $a = cte$	$x = x_0 + v_0 \cdot t + \frac{1}{2} a \cdot t^2$ $v = v_0 + a \cdot t$ $v^2 = v_0^{\ 2} + 2a \cdot (x - x_0)$	
Circular motion $\omega = cte,\ \alpha = 0$	$\theta = \theta_0 + \omega \cdot t$	
Circular uniformly accelerated motion $\alpha = cte$	$\theta = \theta_0 + \omega_0 \cdot t + \frac{1}{2} \alpha \cdot t^2$ $\omega = \omega_0 + \alpha \cdot t$	
Other formulae	Instantaneous velocity	$\vec{v} = \frac{d\vec{r}}{dt}$
	Instantaneous acceleration	$\vec{a} = \frac{d\vec{v}}{dt}$
	Average velocity	$\vec{v}_a = \frac{\Delta\vec{r}}{\Delta t} = \frac{\vec{r}_F - \vec{r}_I}{t_F - t_I}$
	Average acceleration	$\vec{a}_a = \frac{\Delta\vec{v}}{\Delta t} = \frac{\vec{v}_F - \vec{v}_I}{t_F - t_I}$
	Tangential acceleration	$a_t = \frac{d\lvert\vec{v}\rvert}{dt}$
	Distance for circular motion	$S = \theta \cdot R$
	Speed for circular motion	$v = \omega \cdot R$
	Tangential acceleration for circular motion	$a_t = \alpha \cdot R$
	Normal acceleration for circular motion	$a_n = \frac{v^2}{R} = \omega^2 \cdot R$
	Total acceleration	$a^2 = a_t^2 + a_n^2$
Unit conversion	**km / h** × 1000 / 3600 → **m/s** **rpm** × 2π / 60 → **rad/s** **rad** ÷ 2π → **turn**	

Symbol	Magnitude	SI unit
x, S	Position, distance	m
x_0	Initial position	m
v	Velocity, speed	m/s
v_0	Initial speed (velocity)	m/s
a	Total acceleration	m/s^2
a_t	Tangential acceleration	m/s^2
a_n	Normal acceleration	m/s^2

Symbol	Magnitude	SI unit
θ	Angular position	rad
θ_0	Initial angular position	rad
ω	Angular speed	rad/s
ω_0	Initial angular speed	rad/s
α	Angular acceleration	rad/s^2
R	Trajectory radius	m