Mechanics 1
Velocity & Acceleration Equations

$$v = u + at$$

$$v^2 = u^2 + 2as$$

$$s = ut + \tfrac{1}{2}at^2$$

$$s = vt - \tfrac{1}{2}at^2$$

$$s = \tfrac{1}{2}(u + v)t$$

$a =$ acceleration
$s =$ displacement
$t =$ time
$u =$ initial velocity
$v =$ final velocity

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$$F = ma$$

$$F_F = \mu R$$

(mom bef = mom aft)

$a =$ acceleration F = force
$s =$ displacement $(F_F$ = friction)
$t =$ time μ = coefficient of
$u =$ initial velocity   friction
$v =$ final velocity R = normal reaction