

# Physics

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## 1 Physics Kinematic Equations

Use the 'flex' command to put items beside eachother. Substitute values into the kinematic equations using the following keys: a=?, t=?, d=?, v1=?, v2=?

$$(\Delta d) = (v_1)(\Delta t) + \frac{1}{2}(a)(\Delta t)^2 \qquad (\Delta d) = (13.6)(\Delta t) + \frac{1}{2}(0.264)(\Delta t)^2$$

$$(\Delta d) = (v_2)(\Delta t) - \frac{1}{2}(a)(\Delta t)^2 \qquad (\Delta d) = (0)(\Delta t) - \frac{1}{2}(0.264)(\Delta t)^2$$

$$(\Delta d) = \left( \frac{(v_1) + (v_2)}{2} \right) (\Delta t) \qquad (\Delta d) = \left( \frac{(10.2) + (v_2)}{2} \right) (10.6)$$

$$(v_2) = (v_1) + (a)(\Delta t) \qquad (v_2) = (16.7) + (a)(10.6)$$

$$(v_2) = (v_1) + 2(a)(\Delta d) \qquad (v_2) = (v_1) + 2(a)(9.4)$$