

Kinematic Equations 3

Objectives:

As in kinematic equations 2, use each of the kinematic equations to solve problems.

Name	Equation
Definition of Acceleration	$v_f = v_i + a \cdot \Delta t$
The King of Kinematic Equations	$\Delta x = v_i \cdot \Delta t + \frac{1}{2} a (\Delta t)^2$
The Average Velocity Formula	$\Delta x = \left(\frac{v_i + v_f}{2} \right) \Delta t$
No-Time Equation	$v_f^2 = v_i^2 + 2a \cdot \Delta x$

However, in this quiz, unlike in kinematic equations 2, problems are more real world and less clearly defined. Students must understand the problem being asked and model it in terms of kinematic quantities.

- Problems involving free-fall, in which acceleration = 9.8 m/s^2 , appear frequently on this quiz.