

HP Prime Kinematics App

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The kinematics app is a collection of formula that is to be used to solve problems in classical mechanics problems where the acceleration is constant.

It is a solve app that contains the four main equations of motion, these are:

- $V = U + A * T$
- $S = U * T + \frac{1}{2} * A * T^2$
- $V^2 = U^2 + 2 * A * S$
- $S = \frac{1}{2} * (V + U) * T$

Where:

- U is the initial velocity
- V is the final velocity
- A is the acceleration
- S is the displacement
- T is the time

More detail on linear motion can be found at Wikipedia

To install this app:

- Install the HP connectivity kit
- Connect your calculator to the computer with the supplied cable
- Run the connectivity kit
- Unzip the Kinematics.hpapp file to a folder
- Drag this file into the Application folder in the connectivity kit
- Your app should now be installed

To run this app:

- Click on the applications button
- Find the "Kinematicss" app
- Either click on the app or highlight it using the arrow keys and then hit enter
- Click on the SYMB button if the calculator is not already in the equation editor view
- Check mark the formula you are interested in
- Click on the NUM key, this will bring up the variable editor
- Enter the values you already know
- Check the values you wish to find
- Click on solve in the soft menu, at the bottom of the screen

Enjoy this app and best wishes in its use,

Mick Carey

Links:

[HP Forum](#)

[HP Museum \(forum\)](#)

[My youtube channel on the HP Prime](#)