

FROM YOUR VIDEO TO A SPREADSHEET:

- From the video, click on the upload icon, then “data file”
- “open in” Import with Graphical Analysis (this is an app you need)
- Once in Graphical Analysis, click on the icon to the left of the upload icon, select “table”
- A data table will show up, click on the upload icon again and “open in” import with numbers.
- Open the spreadsheet to view your data.

USING FORMULAS WITH NUMBERS:

FINDING VELOCITY:

- Add a new column to your data table
- To find velocity, you need to find the **change in distance divided by the change in time**. (fyi, velocity is given to you already but in case you have a situation where you only have distance (x) and time (s) measured, follow these steps).
- Double tap in the second row of your new column and hit the equal sign in the formula tool bar.
- Open parenthesis, tap on the second row for the X(m) column, hit the minus sign and then tap on the first row for the X(m) column, close parenthesis, hit the divide sign, open parenthesis, tap on the second row of the Time(s) column, hit the minus sign and then tap on the first row for the Time(s) column, close parenthesis and then hit the green check mark. Your answer will be in the cell you started to put the formula in.
- To duplicate the formula for each row, tap the cell with the answer you just created, and hit COPY.
- Highlight the column and hit PASTE, THEN PASTE FORMULA. You should now see all of your calculated values.

FINDING MOMENTUM:

- To find momentum, create a new column and put in the units for momentum in the very top cell (grayed cell).
- Double tap on the second row of that column, hit the equal sign. Input the value of your mass in the formula bar, click on the second row of your velocity that you found, and hit the green check. Your answer for momentum will now be in the new column you created.
- To duplicate the formula for each row, tap the cell with the answer you just created, and hit COPY.
- Highlight the column and hit PASTE, THEN PASTE FORMULA. You should now see all of your calculated values.