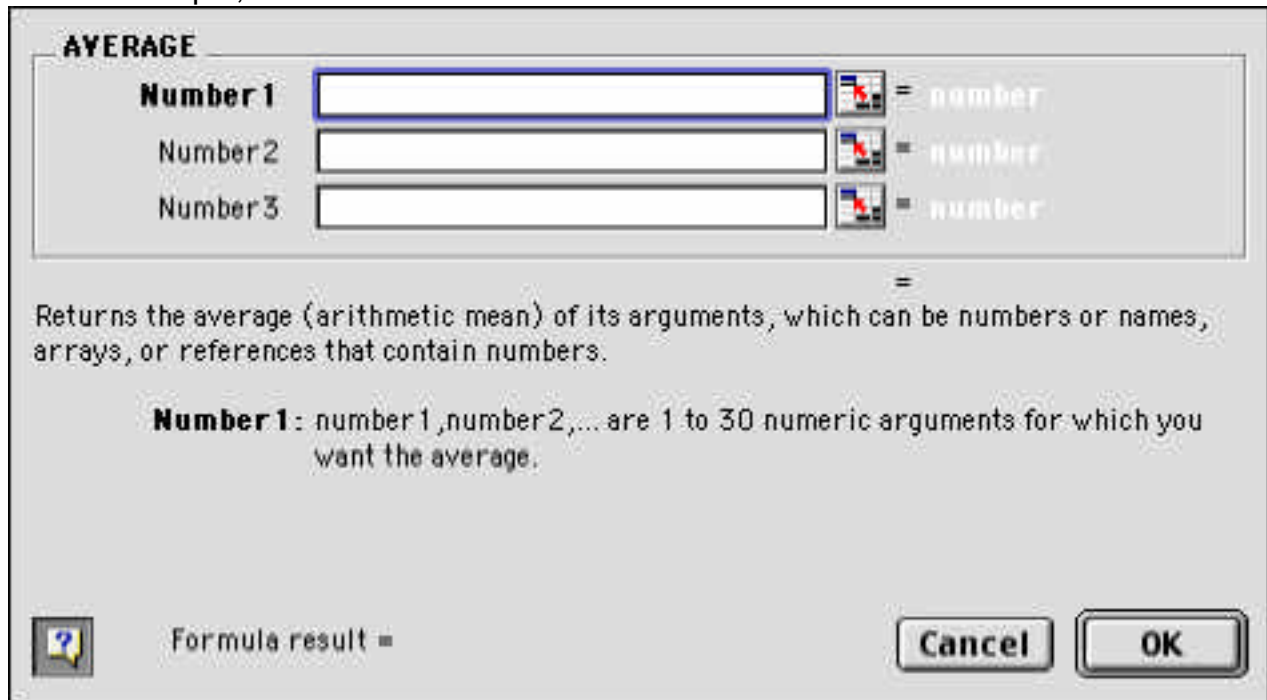


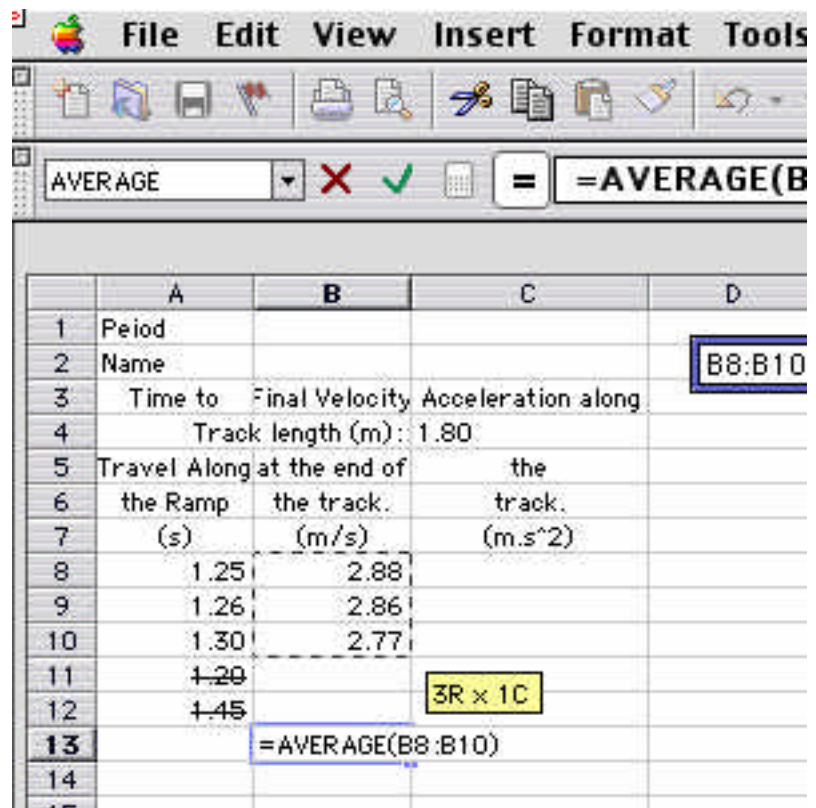
# Using Excel 2001 to Create a Data Table

The next screen will look similar to the one below. It may have more of less input selections. If anything in is the "Number 1" input, delete it.



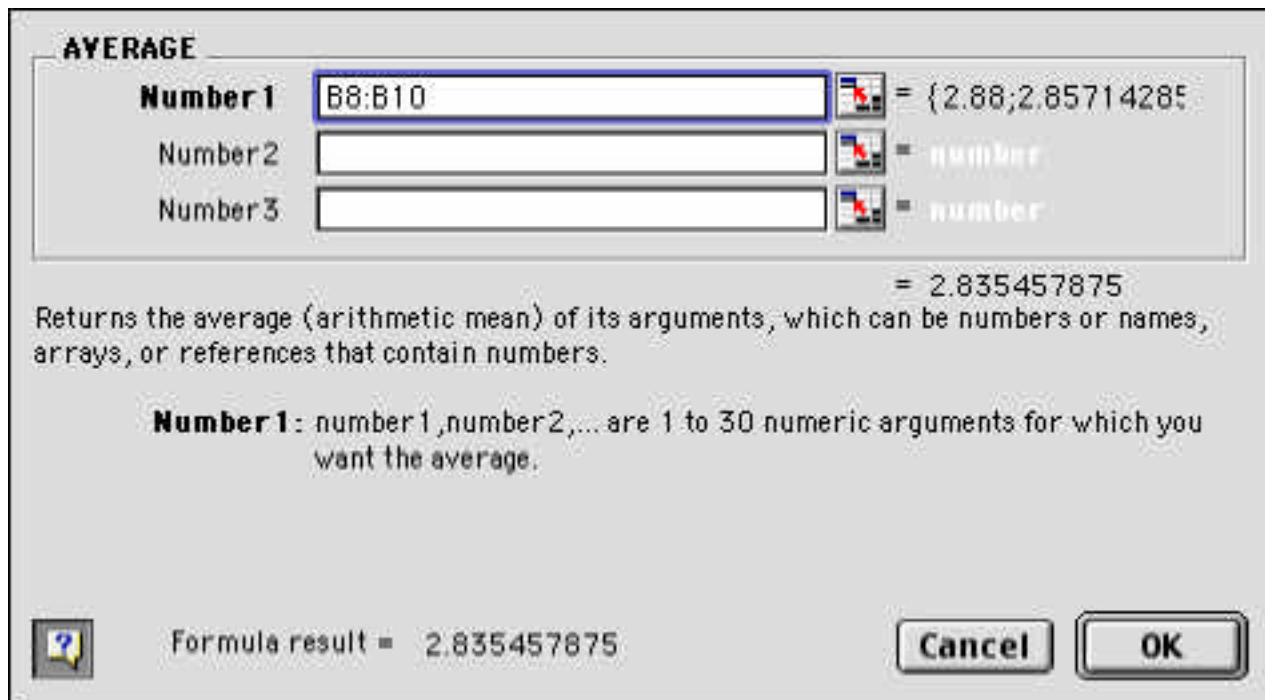
Move the previous window out of the way if necessary to see the part of the table containing the numbers.

Highlight the cells you want the average of (from B8 to B10 in the column)



## Using Excel 2001 to Create a Data Table

The window will pop up again and look something like the one below.



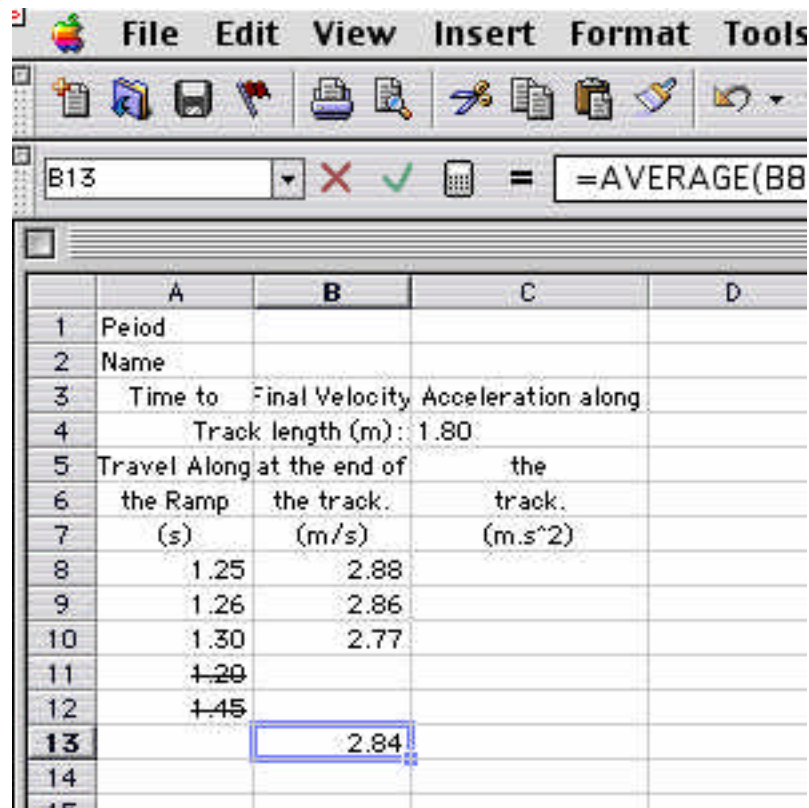
When you click on the **OK** button the calculator will now look like this.

Click on its **OK** button.

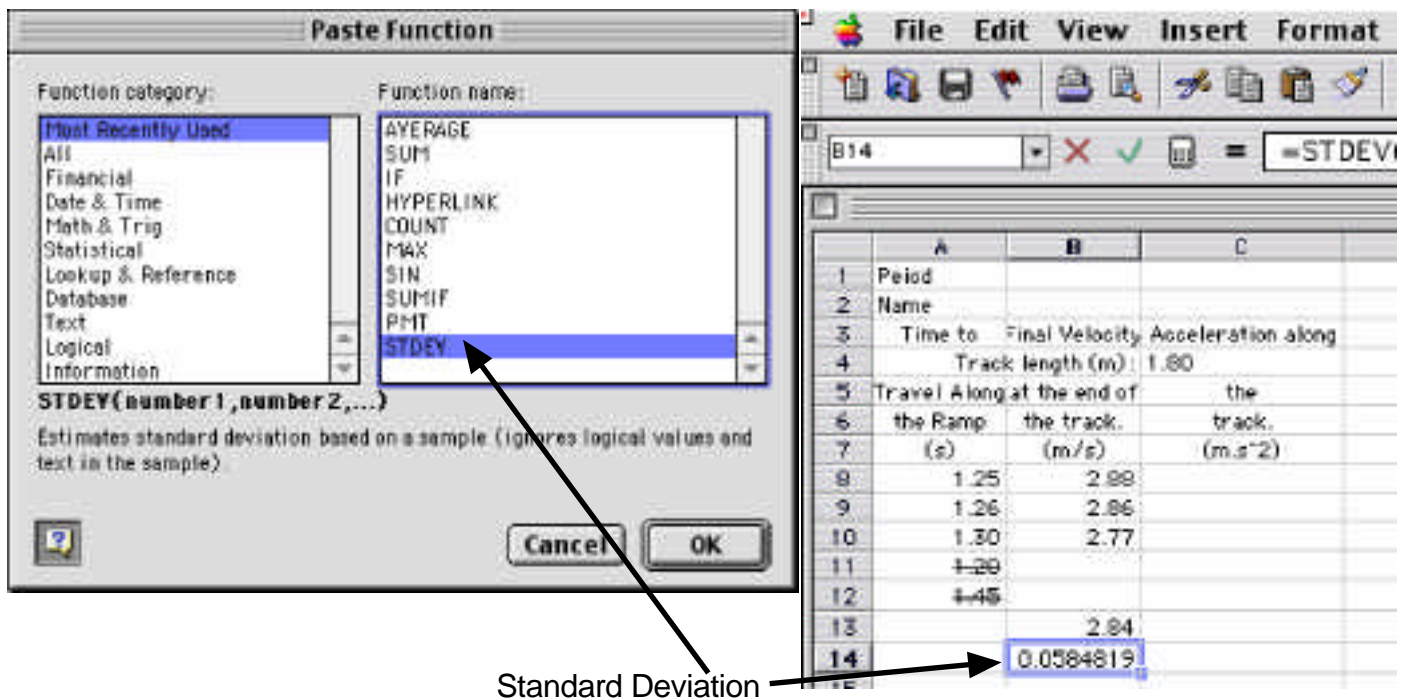


# Using Excel 2001 to Create a Data Table

Cell B13 will now look like the one at the right.



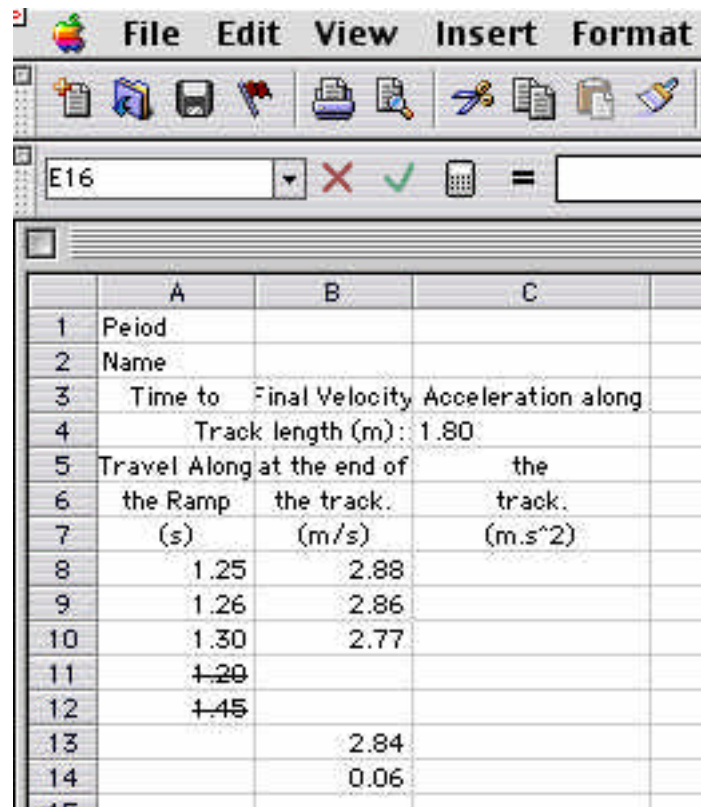
One of the other values you will need for a complete data table is the standard deviation this will go below the average. Practice your skill again and use the **Standard Deviation** function to create the spreadsheet below.



Using the instructions on page four, set the precision to 2 decimals to line up with the number above it.

# Using Excel 2001 to Create a Data Table

The final document should look like the one below.



The screenshot shows the Microsoft Excel 2001 interface. The menu bar includes File, Edit, View, Insert, and Format. The toolbar contains icons for New, Open, Save, Print, Paste, Copy, and Undo. The active cell is E16. The data table is as follows:

	A	B	C
1	Peiod		
2	Name		
3	Time to	Final Velocity	Acceleration along
4	Track length (m): 1.80		
5	Travel Along at the end of		the
6	the Ramp	the track.	track.
7	(s)	(m/s)	(m.s <sup>2</sup> )
8	1.25	2.88	
9	1.26	2.86	
10	1.30	2.77	
11	<del>1.20</del>		
12	<del>1.45</del>		
13		2.84	
14		0.06	
15			

# Using Excel 2001 to Create a Data Table

## PRACTICE WHAT YOU HAVE LEARNED

Make the necessary editing changes to make the spread sheet look like the one below.

### Hints:

The formula for Acceleration is

$$a = \frac{v_f}{t} \text{ for this exercise. That's "=B8/A8" in cell C8}$$

Where the velocity is in the "B" column and the time is in the "A" column.

Use the fill down command to copy the new formula.

Center align the numbers.

Change the number format to Fixed 2 decimal places.

Right align the average and standard deviation labels.

	A	B	C
1	Period		
2	Name		
3	Time to	Final Velocity	Acceleration along
4	Track length (m): 1.80		
5	Travel Along at the end of		the
6	the Ramp	the track.	track.
7	(s)	(m/s)	(m.s <sup>2</sup> )
8	1.25	2.88	2.30
9	1.26	2.86	2.27
10	1.30	2.77	2.13
11	<del>1.20</del>		
12	<del>1.45</del>		
13	Average->	2.84	2.23
14	Stdev->	0.06	0.09

# Using Excel 2001 to Create a Data Table

## MOVING A COLLECTION OF CELLS

The variable measured once is not quite in the correct place. It should swap places with the data above it.

To do this the some of the cells need to be moved away; the other cells will moved into its place, then the original row of moved cells will be placed where the original cells were.

(1) Highlight the cells to be moved. Move the cursor down until it changes to a hand.

	A	B	C	D	E	F
1	Peiod					
2	Name					
3	Time to	Final Velocity	Acceleration along			
4	Track length (m): 1.80					
5	Travel Along	at the end of	the			
6	the Ramp	the track.	track.			
7	(s)	(m/s)	(m.s <sup>2</sup> )			
8	1.25	2.88	2.30			
9	1.26	2.86	2.27			
10	1.30	2.77	2.13			
11	<del>1.20</del>					
12	<del>1.45</del>					
13	Average->	2.84	2.23			
14	Stdev->	0.06	0.09			
15						

(2) With the cursor as a hand, drag the cells to the right.

	A	B	C	D	E	F
1	Peiod					
2	Name					
3	Time to	Final Velocity	Acceleration along			
4				Track length (m): 1.80		
5	Travel Along	at the end of	the			
6	the Ramp	the track.	track.			
7	(s)	(m/s)	(m.s <sup>2</sup> )			
8	1.25	2.88	2.30			
9	1.26	2.86	2.27			
10	1.30	2.77	2.13			
11	<del>1.20</del>					
12	<del>1.45</del>					
13	Average->	2.84	2.23			
14	Stdev->	0.06	0.09			
15						

## Using Excel 2001 to Create a Data Table

(3) Highlight the cells above that are to be moved. Move the cursor down until it changes to a hand.

	A	B	C	D	E	F
1	Period					
2	Name					
3	Time to	Final Velocity	Acceleration along			
4						Track length (m): 1.80
5	Travel Along	at the end of	the			
6	the Ramp	the track.	track.			
7	(s)	(m/s)	(m.s <sup>2</sup> )			
8	1.25	2.88	2.30			
9	1.26	2.86	2.27			
10	1.30	2.77	2.13			
11	<del>1.20</del>					
12	<del>1.45</del>					
13	Average->	2.84	2.23			
14	Stdev->	0.06	0.09			

(4) Drag the highlighted cells down a row into place.

	A	B	C	D	E	F
1	Period					
2	Name					
3						
4	Time to	Final Velocity	Acceleration along			Track length (m): 1.80
5	Travel Along	at the end of	the			
6	the Ramp	the track.	track.			
7	(s)	(m/s)	(m.s <sup>2</sup> )			
8	1.25	2.88	2.30			
9	1.26	2.86	2.27			
10	1.30	2.77	2.13			
11	<del>1.20</del>					
12	<del>1.45</del>					
13	Average->	2.84	2.23			
14	Stdev->	0.06	0.09			

(5) Highlight the cells that were moved earlier. Move the cursor down until it changes to a hand.

	A	B	C	D	E	F
1	Period					
2	Name					
3						
4	Time to	Final Velocity	Acceleration along	Track length (m): 1.80		
5	Travel Along	at the end of	the			
6	the Ramp	the track.	track.			
7	(s)	(m/s)	(m.s <sup>2</sup> )			
8	1.25	2.88	2.30			
9	1.26	2.86	2.27			
10	1.30	2.77	2.13			
11	<del>1.20</del>					
12	<del>1.45</del>					
13	Average->	2.84	2.23			
14	Stdev->	0.06	0.09			

## Using Excel 2001 to Create a Data Table

(6) Drag these cells above the others. Finished. The two rows are swapped.

	A	B	C	D	E	F
1	Period					
2	Name					
3	Track length (m):	1.80				
4	Time to Travel Along the Ramp (s)	Final Velocity (m/s)	Acceleration along the track. (m.s <sup>2</sup> )			
5						
6						
7						
8	1.25	2.88	2.30			
9	1.26	2.86	2.27			
10	1.30	2.77	2.13			
11	<del>1.20</del>					
12	<del>1.45</del>					
13	Average->	2.84	2.23			
14	Stdev->	0.06	0.09			
15						

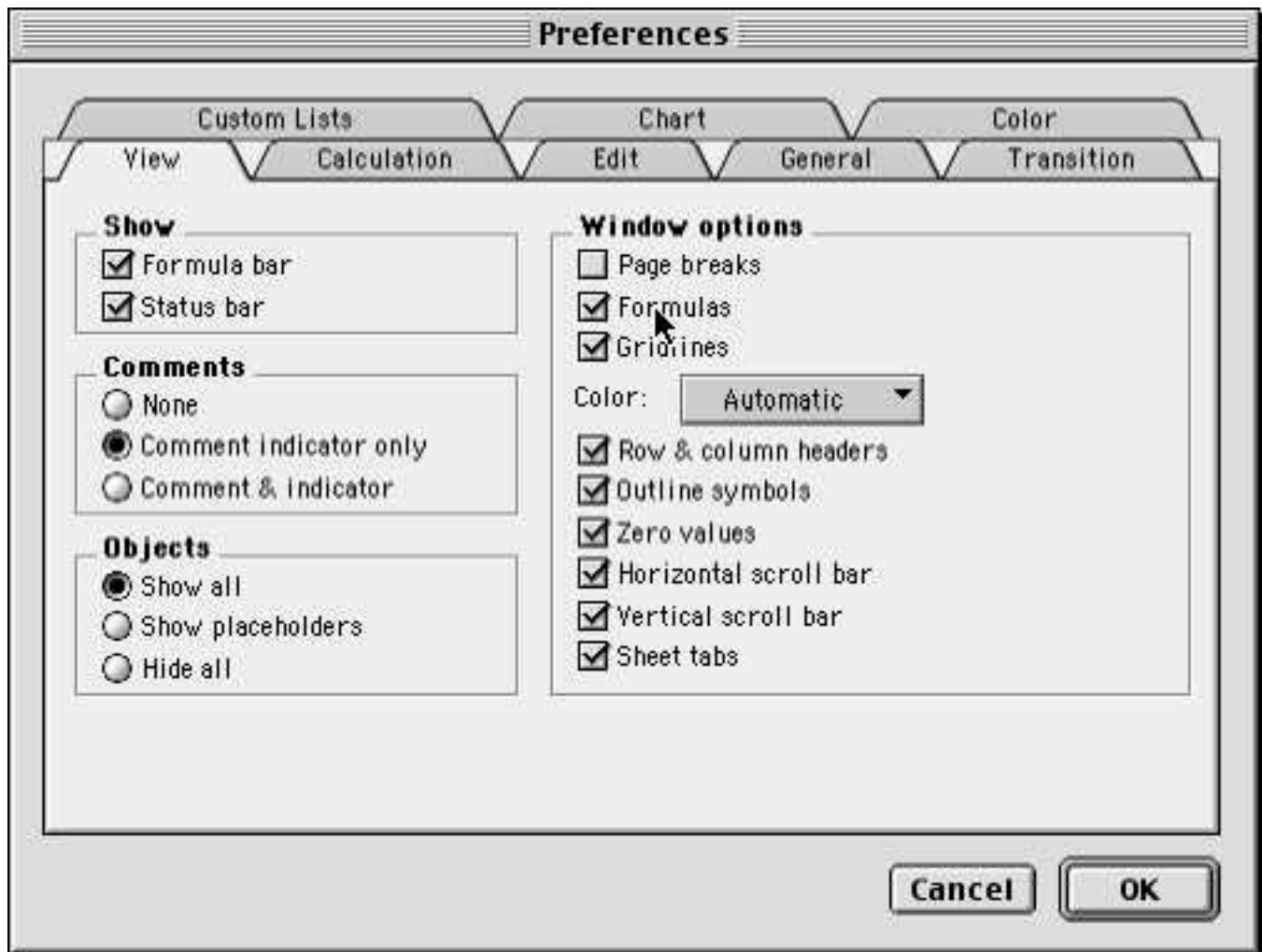
To credit for a spreadsheet a copy must be submitted showing that you used the average and standard deviation formulae. This is done by changing one setting and printing the spreadsheet.

From the **Edit** menu select **Preferences...** or **Settings...**



## Using Excel 2001 to Create a Data Table

Click on the "View" tab and click on **Formulas** to turn display them in the document.



Below is what the final page will look like.

	A	B	C
1	Period		
2	Name		
3		Track length (m): 1.8	
4	Time to	Final Velocity	Acceleration along
5	Travel Along	at the end of	the
6	the Ramp	the track.	track.
7	(s)	(m/s)	(m.s <sup>2</sup> )
8	1.25	=2*\$C\$3/A8	=B8/A8
9	1.26	=2*\$C\$3/A9	=B9/A9
10	1.3	=2*\$C\$3/A10	=B10/A10
11	1.2		
12	1.45		
13	Average->	=AVERAGE(B8:B10)	=AVERAGE(C8:C10)
14	Stdev->	=STDEV(B8:B10)	=STDEV(C8:C10)