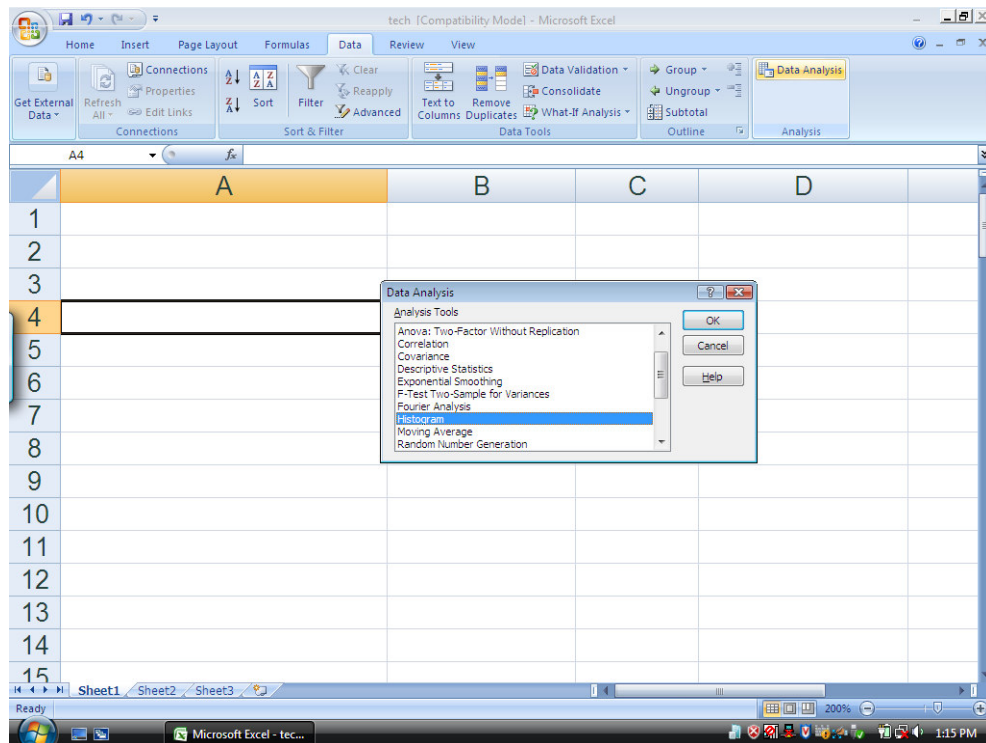


First, type in a column of values that represents the endpoints of the classes of your distribution.

Ready

Now get in Data Analysis. *Data Analysis* will show up along the panel of options under the *Data* tab. If the option isn't revealed under the *Data* tab, you must add the option in to Excel.



Get into the histogram option within Data Analysis. Now you are ready to input your data and the endpoints of your distribution categories.

The screenshot shows a Microsoft Excel spreadsheet with the following data:

City	Housing Units	endpoints
Alhambra	30069	
Baldwin Park	17430	13533
Bradbury	311	27066
Burbank	42847	40599
Cerritos	15607	54132
Hermosa Beach	9840	
La Verne	11286	
Lancaster	41745	
Malibu	6126	
Maywood	6701	
Montebello	19416	
Pasadena	54132	
Pico Rivera	16807	
South Pasadena	10850	
Temple City	11674	

The Histogram dialog box is open, showing the following options:

- Input Range: (empty)
- Bin Range: (empty)
- ☐ Labels
- Output options:
 - ☐ Output Range: (empty)
 - ☒ New Worksheet Ply: (empty)
 - ☐ New Workbook
 - ☐ Pareto (sorted histogram)
 - ☐ Cumulative Percentage
 - ☐ Chart Output

Click within the Input Range box and highlight the housing units data.

The screenshot shows the same Excel spreadsheet as before, but with the housing units data (F3:F17) highlighted. The Histogram dialog box is open, and the Input Range box now contains the formula `=F3:F17`.

The Histogram dialog box options are the same as in the previous screenshot:

- Input Range: `=F3:F17`
- Bin Range: (empty)
- ☐ Labels
- Output options:
 - ☐ Output Range: (empty)
 - ☒ New Worksheet Ply: (empty)
 - ☐ New Workbook
 - ☐ Pareto (sorted histogram)
 - ☐ Cumulative Percentage
 - ☐ Chart Output

Click within the *Bin Range* box and highlight your endpoints.

The screenshot shows the 'Histogram' dialog box in Microsoft Excel. The 'Input Range' is set to '\$F\$3:\$F\$17' and the 'Bin Range' is set to '\$I\$4:\$I\$7'. The 'New Worksheet Ply' option is selected under 'Output options'. The background spreadsheet shows a list of cities and their housing units, with endpoints 13533, 27066, 40599, and 54132 highlighted in red.

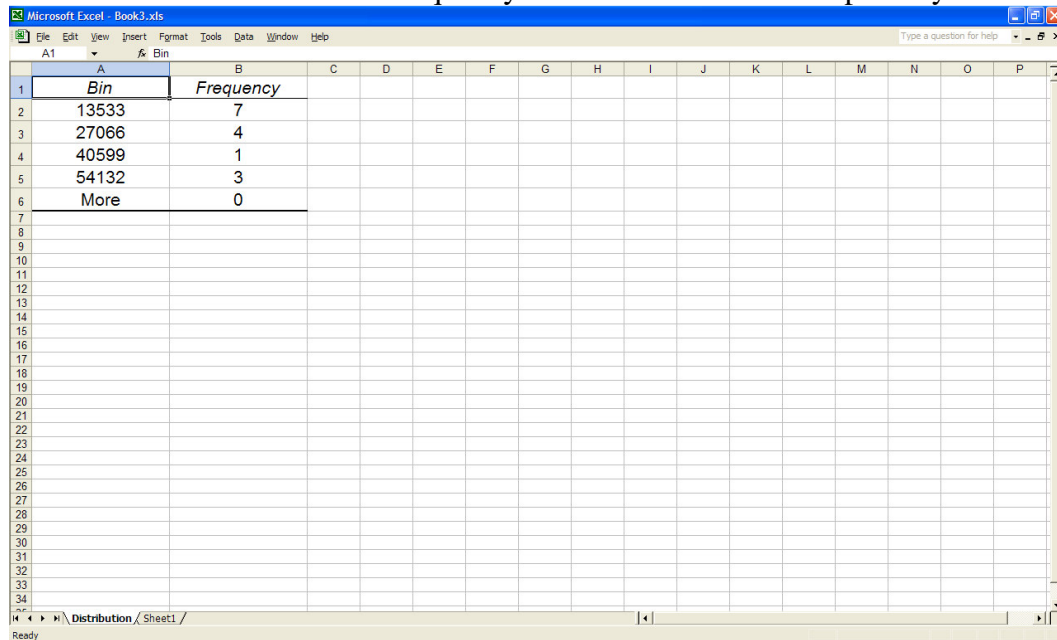
City	Housing Units
Alhambra	30069
Baldwin Park	17430
Bradbury	311
Burbank	42847
Cerritos	15607
Hermosa Beach	9840
La Verne	11286
Lancaster	41745
Malibu	6126
Maywood	6701
Montebello	19416
Pasadena	54132
Pico Rivera	16807
South Pasadena	10850
Temple City	11674

The default output option is to create a new worksheet with your distribution. In the *New Worksheet Ply* box, name the new worksheet (use any name).

The screenshot shows the 'Histogram' dialog box in Microsoft Excel. The 'Input Range' is set to '\$F\$3:\$F\$17' and the 'Bin Range' is set to '\$I\$4:\$I\$7'. The 'New Worksheet Ply' option is selected under 'Output options', and the new worksheet is named 'Distribution'. The background spreadsheet is the same as the previous image.

City	Housing Units
Alhambra	30069
Baldwin Park	17430
Bradbury	311
Burbank	42847
Cerritos	15607
Hermosa Beach	9840
La Verne	11286
Lancaster	41745
Malibu	6126
Maywood	6701
Montebello	19416
Pasadena	54132
Pico Rivera	16807
South Pasadena	10850
Temple City	11674

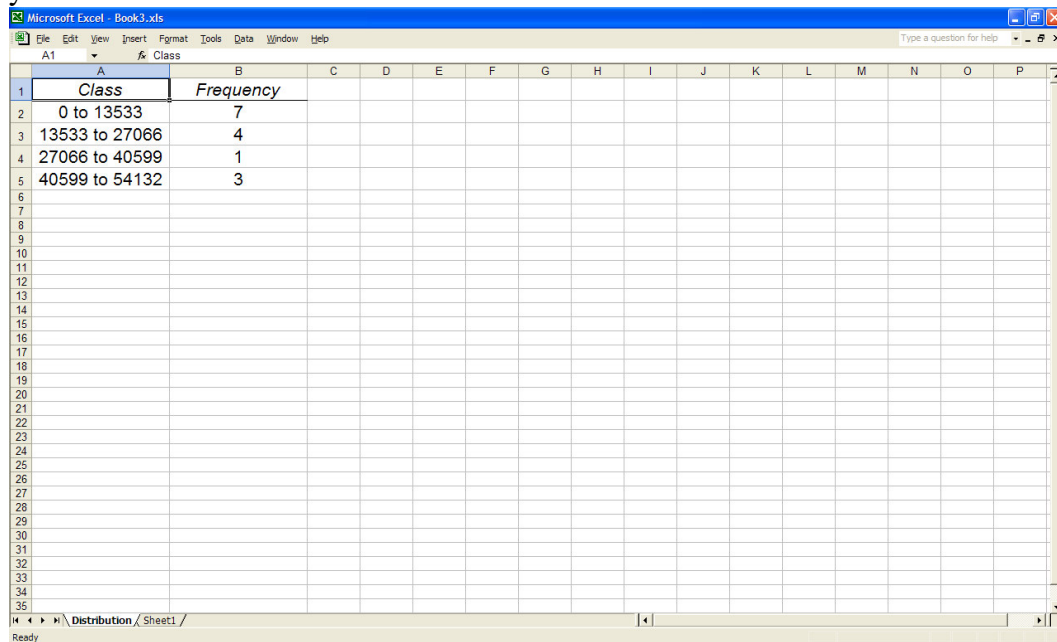
Click OK. What arises is the frequency for each class whose endpoints you constructed.



The screenshot shows a Microsoft Excel window titled "Microsoft Excel - Book3.xls". The worksheet is named "Sheet1" and contains a table with two columns: "Bin" and "Frequency". The data is as follows:

Bin	Frequency
13533	7
27066	4
40599	1
54132	3
More	0

You can edit the worksheet and complete the interval definitions by typing them in yourself.



The screenshot shows a Microsoft Excel window titled "Microsoft Excel - Book3.xls". The worksheet is named "Sheet1" and contains a table with two columns: "Class" and "Frequency". The data is as follows:

Class	Frequency
0 to 13533	7
13533 to 27066	4
27066 to 40599	1
40599 to 54132	3

Microsoft Excel - Book3.xls

File Edit View Insert Format Tools Data Window Help

Type a question for help

PERCENTILE X ✓ N =B2/15

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	Class	Frequency	Relative Frequency											
2	0 to 13533	7	=B2/15											
3	13533 to 27066	4												
4	27066 to 40599	1												
5	40599 to 54132	3												
6														
7														
8														
9														
10														
11														
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24														

Enter

Distribution / Sheet1 /

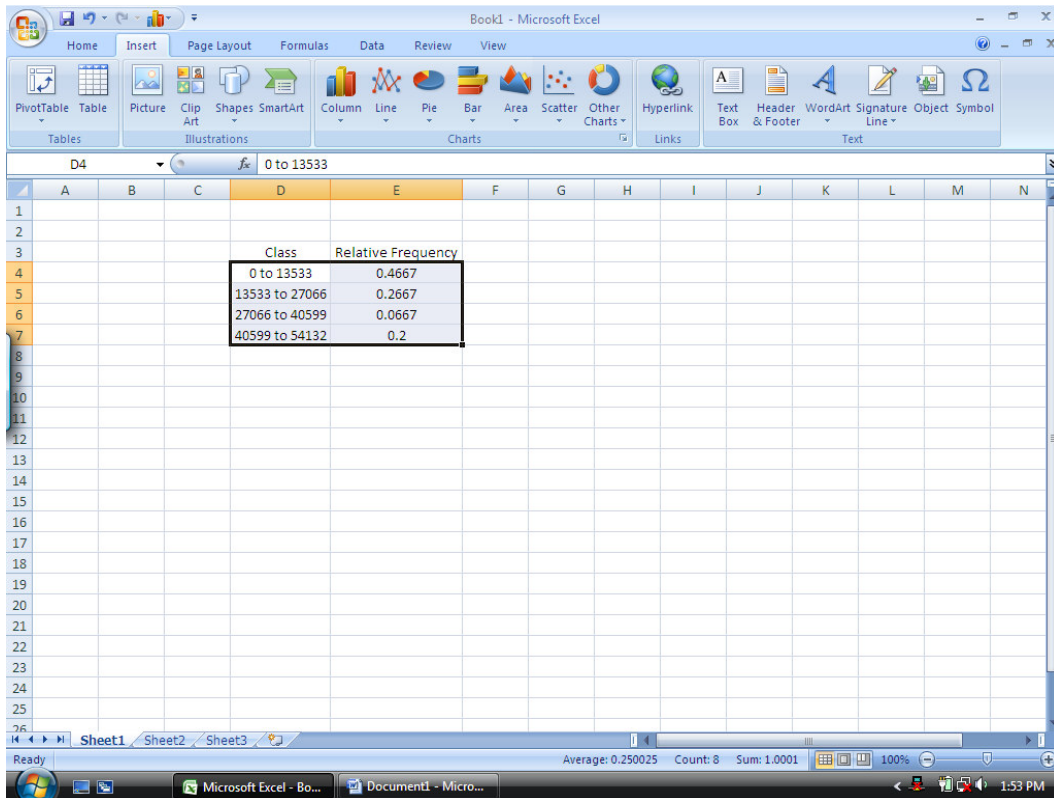
The screenshot shows a Microsoft Excel spreadsheet with the following data:

A	B	C	D	E	F	G	H	I	J	K	L	M	N
Class	Frequency	Relative Frequency											
0 to 13533	7	0.4667											
13533 to 27066	4	0.2667											
27066 to 40599	1	0.0667											
40599 to 54132	3	0.2000											

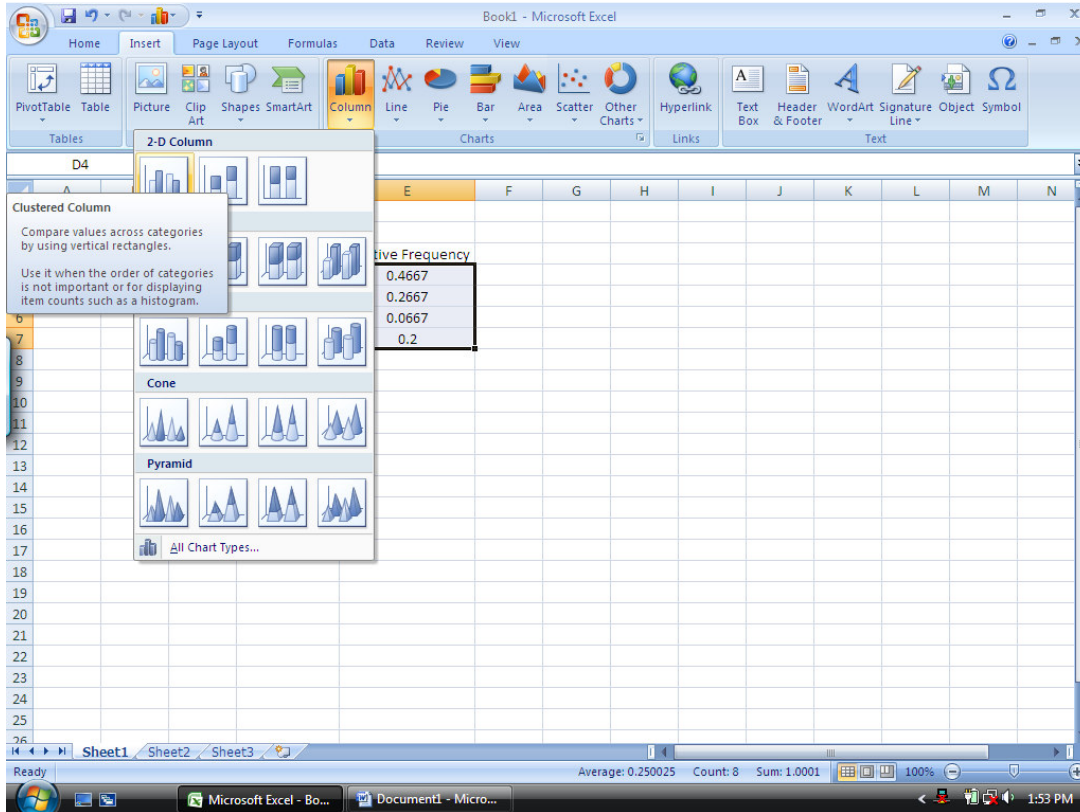
The spreadsheet interface includes the Microsoft Excel title bar, menu bar (File, Edit, View, Insert, Format, Tools, Data, Window, Help), and a status bar at the bottom indicating 'Ready'.

Now let's create an illustration of the relative frequency distribution.

First highlight the data you want to chart. Click on *Insert* as shown below.



You will create a column chart. Use the top left column option.



The chart will be created. You can go back and edit the chart. Select a chart layout, such as layout 9. You can now type in the chart title etc.

