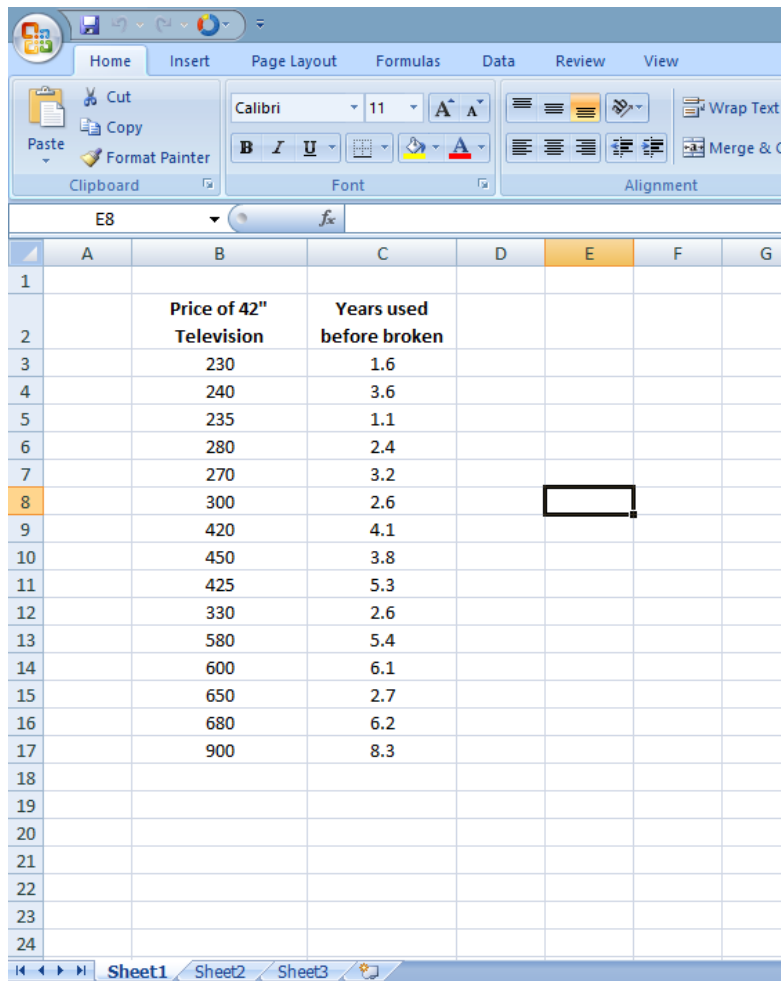


## Spreadsheets: Scatter Diagrams

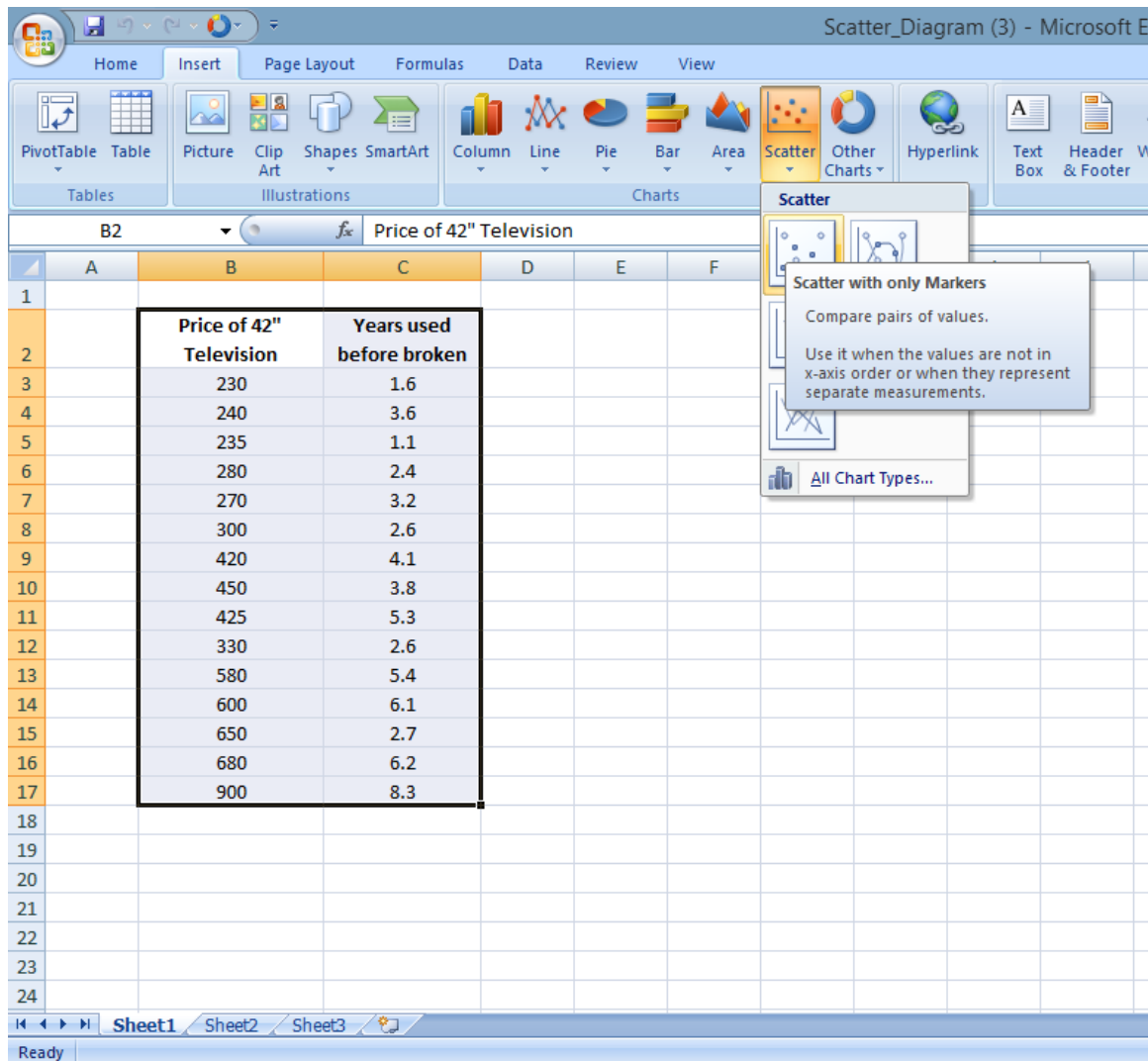
To form a scatter diagram in Excel, you'll start with a dataset of two variables.



The screenshot shows the Microsoft Excel interface with the 'Home' tab selected. The ribbon includes 'Clipboard', 'Font', and 'Alignment' groups. The worksheet grid shows columns A through G and rows 1 through 24. The data is as follows:

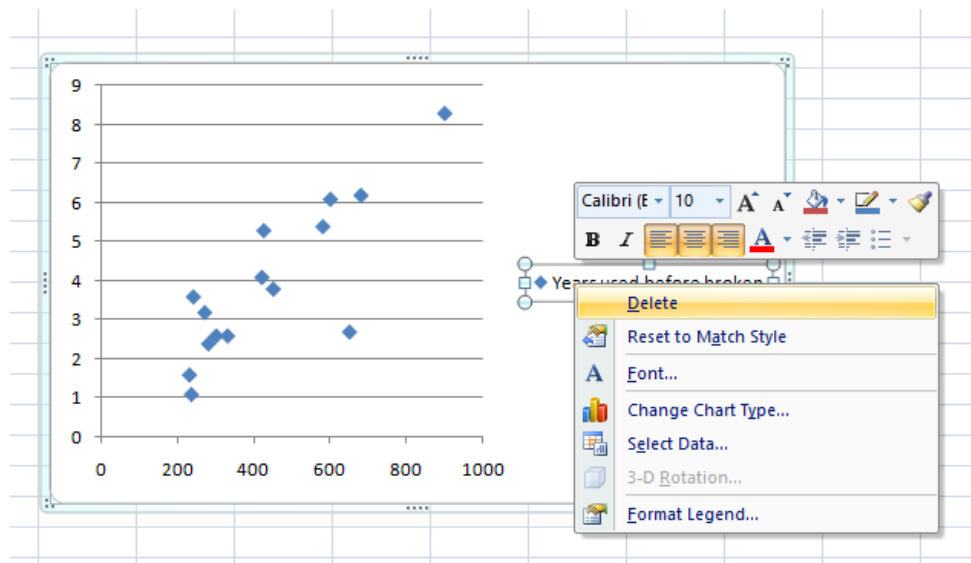
	A	B	C	D	E	F	G
1							
2		<b>Price of 42" Television</b>	<b>Years used before broken</b>				
3		230	1.6				
4		240	3.6				
5		235	1.1				
6		280	2.4				
7		270	3.2				
8		300	2.6				
9		420	4.1				
10		450	3.8				
11		425	5.3				
12		330	2.6				
13		580	5.4				
14		600	6.1				
15		650	2.7				
16		680	6.2				
17		900	8.3				
18							
19							
20							
21							
22							
23							
24							

In this example, our dataset contains the price of a 42 inch TV and the number of years used it took before the TV broke. So what we're trying to graphically display is the relationship between the price of the TV and how durable it is. There could be no relationship at all, or there could be a very strong relationship. It's really difficult to tell when looking at the raw data set. A graphic display of the data should help us see if in fact there is a correlation. Creating a scatter diagram is the same in Excel as in Zoho Sheets.

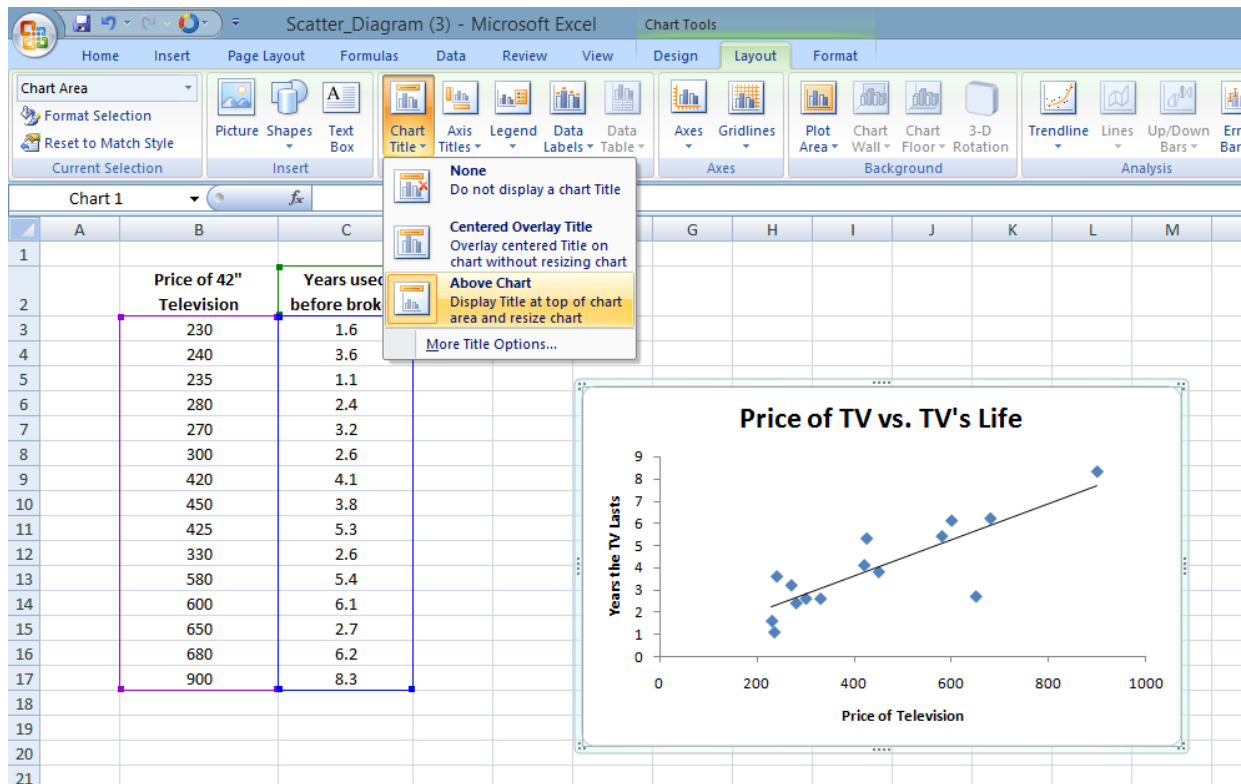


You'll start by selecting the entire data set, including the data about the price of the TVs as well as the number of years until the TV broke. Again, to do that, select the cell, click and hold, and drag down and select both columns. Next we'll go to the insert tab and you'll see there are a number of different charts to choose from. Select the Scatter diagram with only markers, which is the say that we're only displaying the data points, but no lines connecting the data points.

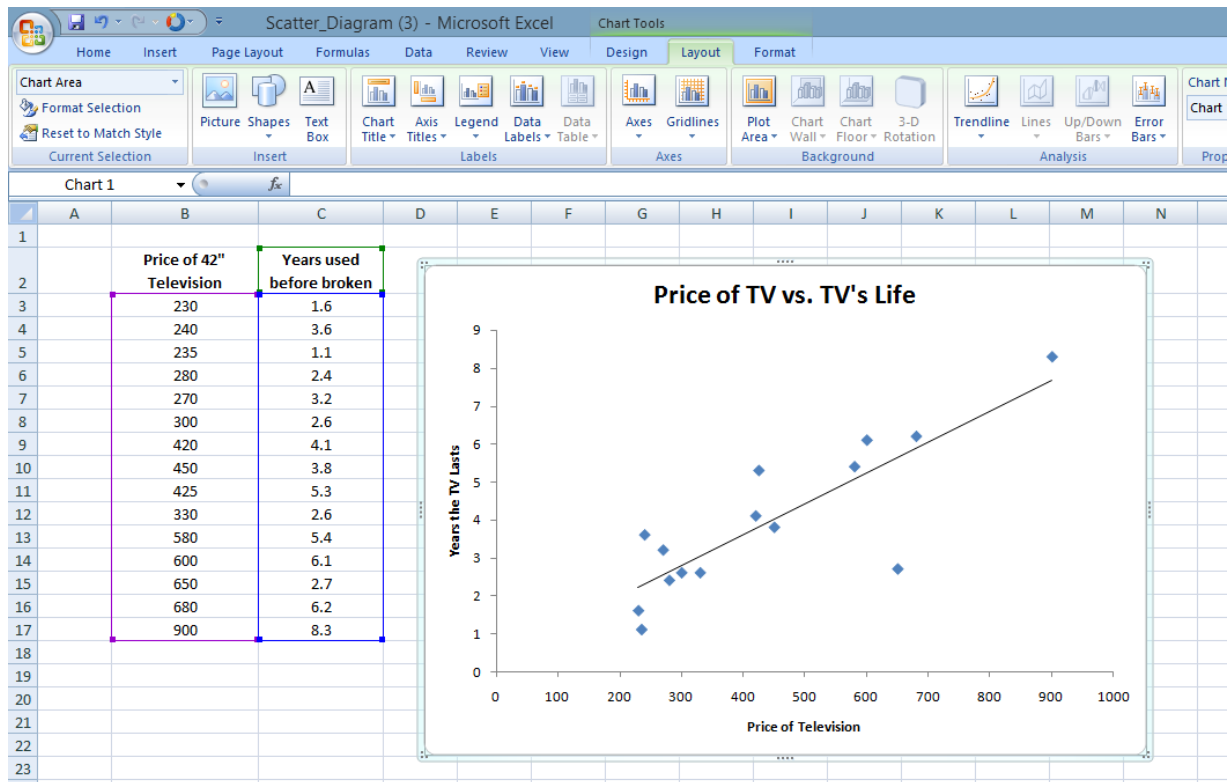
To make this chart more presentable and easier to understand, we should definitely add titles.



Let's delete the legend and the gridlines. To delete the legend, click on it and then click delete. To delete the gridlines you can click on the gridlines and, again, click delete.



Next, let's change these axis title names to "Price of Television" and "Years the TV lasts". We'll go to layout, and select axis titles: Primary horizontal axis title (x-axis) and primary vertical axis (for y-axis) where we'll select rotated title. Next, let's also change the title name to "Price of TV vs. TV's Life". This is in Chart Layout where we select a chart title. Finally, let's resize it by selecting the overall graph and extending the corners.



As you can see, a scatter plot is very useful for representing the relationship between two variables.