

How to import data from the internet or Excel to Fathom (or both)

<http://www40.statcan.ca/101/cst01/phys08a.htm?sdi=precipitation>

1. From the internet to Fathom

- a) Open a new document in Fathom, click on “File”, then on “Import from URL” and type in the address of the website that you want.

Or

- b) Open a new document in Fathom, also open the website that you want so that both windows appear on-screen at once.

Click on the web address and drag it into the Fathom document.

2. From Excel to Fathom

- a) In Excel, use the mouse to select all of the cells that you want. While selected, copy them (Ctrl-C) or right click and copy.

- b) Open Fathom, drop a new collection box into it and click “Edit”, then on

- a) Go to the World Cup of Soccer website (www.world-cup-info.com/statistics/world_cup_games_played.htm) and enter the data into Fathom.
- b) Create a graph of the number of points scored per country by dragging the graph icon into your document and dragging the needed columns from your case table.

Or

- a) Go to the Toronto Maple Leafs website (www.mapleleafs.com/team/playerstats.html) and enter the data into Fathom.

- b) Create a graph with the x-attribute representing the number of games played (GM) and the y-attribute representing the points per game (PPG)

Write a concluding statement based on your graph.

Ex: As a class, count the number of students with each eye colour:

1. Brown
2. Blue
3. Green
4. Hazel

Create a bar graph using the graphing calculator.

Step 1: Enter the information into the calculator.

Go to **Stat 1:Edit**.

In L₁, enter the numbers 1-4 representing each eye colour.

In L₂, enter the number of people for each.

Step 2: Graph it.

Turn on Stat Plot (go to 2^{nd} $Y=$). Press **Enter** to turn on Plot 1.

```

StatPlots
1:Plot1...On
  L1 L2
2:Plot2...Off
  L1 L5
3:Plot3...Off
  L1 L6
4:PlotsOff
  
```

Choose the graph type with your cursor. We want the bar graph icon.

```

Plot1 Plot2 Plot3
Off Off Off
Type: L1 [Bar] [Line] [Pie]
Xlist: L1
Ylist: L2
Mark: [ ] [ ] [ ]
  
```

Keep going until the bar graph is selected.

Press **Graph**.

If the window needs adjustment, **Zoom 9:Stat** will always automatically adjust to any stat plot entries.

Ex 6: Repeat the previous example using Fathom or Excel.

Excel

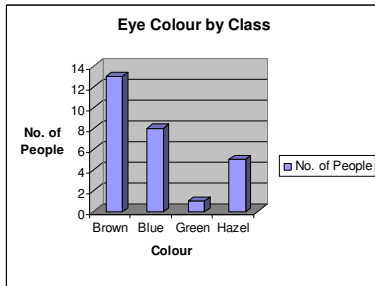
Step 1: Type the eye colours in column A.

Type the number of people in column B.

Click on the chart icon.

Select the style that you want. Keep clicking on Next until finished.

Colour	No. of People
Brown	13
Blue	8
Green	1
Hazel	5



Both of the **mean** and **median** calculations can be done on the graphing calculator. The advantage is that you don't need to enter the data in ascending order.

Steps for the graphing calculator:

1. Enter the data into L_1 by pressing **STAT 1:EDIT**
2. Press **STAT** and scroll over to **CALC**
3. Press **1** for 1-Var Stats
4. Type L_1 by pressing **2nd 1 ENTER**
5. The mean is given by \bar{x} . The median is found by scrolling down the list past the original screen to the word *med*.

Using the graphing calculator, find the mean, median and mode for the heights of 15 rugby players.

182, 178, 181, 182, 172, 176, 183, 177, 173, 176, 185, 181, 177, 182, 175

mean= 178.7

med= 178

mode= 182 (done by hand)

Standard deviation with the graphing calculator):

Steps:

1. Enter the data into L_1 by pressing **STAT 1:EDIT**
2. Press **STAT** and scroll over to **CALC**
3. Press **1** for 1-Var Stats
4. Type L_1 by pressing **2nd 1 ENTER**