

# Spreadsheet Graphics and Charts

Graphics can be created using the Graph button in the spreadsheet view or from the sheet listing, which takes the user to **tiki-graph\_sheet.php?sheetId=1** (1 or the numeric id of that sheet). Two simple forms are presented to select the parameters of the graphic.


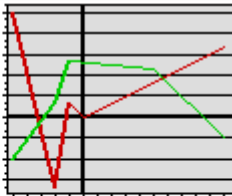
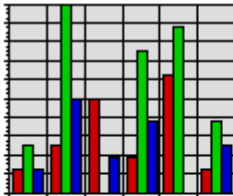
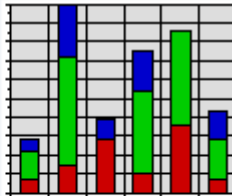
# Select the Graphic Type and Output Format

**Math Results**

Sheet containing the results for the math course

**Select Graphic Type**

Pie Chart    Multiline    Multibar    Bar Stack

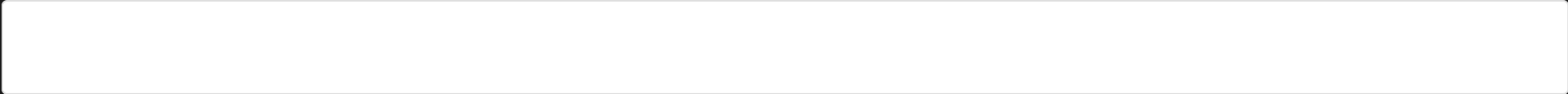
   

Letter   Landscape   PDF   PS

500   400   PNG   JPEG

The radio buttons select the type of graphic to be generated. A first example will be made with the Pie Chart and a second one with Multibar. Multiline and Bar Stack use the same parameters as Bar Stack.

Multiple output formats are available. Depending on the installed extensions on the server, some elements might not be available. PDF and PostScript are printable format and require the paper size and orientation parameters. PNG and JPEG are images and require height and width parameters in pixels.



# Parameters

Figure 2 presents the parameters entered to obtain a pie chart from the spreadsheet and Figure 3 is the result obtained. The page is divided in three sections:

1. Parameter form
2. Spreadsheet
3. Wiki Plug-in

The parameter form is used to select the elements that will be displayed in the graphic. All parameters under the series label are value ranges from the spreadsheet in A1:Z99 format or comma separated list of elements (ex: Blue, ))LightBlue,LightGreen()). The color and style series require special values:

## Color

- Red
- Green
- Blue
- Yellow
- Orange
- LightBlue
- LightGreen

## Style

- Thin-LineStroke
- Thin-FillStroke
- Normal-LineStroke
- Normal-FillStroke
- Bold-LineStroke
- Bold-FillStroke
- Bolder-LineStroke
- Bolder-FillStroke

The spreadsheet is available as a reference to select the ranges.

The wiki plug-in is updated as the parameters are changed in the form. The code displayed can be pasted in a wiki page to display the graphic. The plug-in does not consider the selected output format. Instead, it will automatically select the best format available. If possible, it will display an image and link to a printable format. Preferred image format is PNG and preferred printable format is PDF.

# Pie Chart Parameters

The following table presents the different field of the form, what they are used for and the behavior if left empty.

Title	Used as the title of the graphic
Label	Caption in the legends
Value	Values used in the chart
Color	Colors used for the elements
Style	Change border type

No title

No legend

Required

Automatically selected

Normal-FillStroke

The amount of elements in every range must be the same.

Title: Weight  
 Series:  
 label: B1:D1  
 value: B2:D2  
 color:  
 style:

**show**

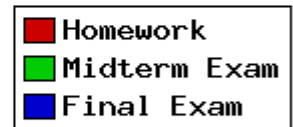
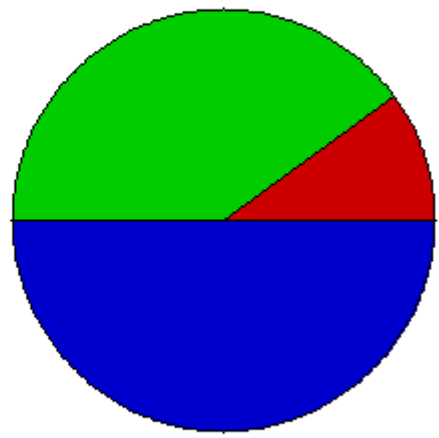
	A	B	C	D	E
1	Student ID	Homework	Midterm Exam	Final Exam	Total
2		10	40	50	
3	A	100	96	74	85.4
4	B	80	80	75	77.5
5	C	75	60	84	73.5
6	D	80	45	90	71
7	E	60	50	75	63.5
8	F	30	40	25	31.5
9	G	75	80	85	82
10	H	90	80	85	83.5
11	I	50	60	60	59
12	J	100	90	95	93.5
13	K	70	75	75	74.5
14	L	80	80	88	84
15	M	45	50	60	54.5
16	N	95	90	87	89
17	O	70	75	75	74.5
18	P	65	65	30	47.5
19	Average	72.8125	69.75	72.6875	71.525
20	Min	30	40	25	31.5
21	Max	100	90	95	93.5

**Wiki plug-in**

```
{ CHART(id=>3, type=>PieChartGraphic, format=>Letter,
orientation=>landscape, label=>B1:D1, value=>B2:D2, color=>, style=>,
width=>500, height=>400)}Weight{CHART}
```



Weight



# Multibar Parameters

Figure 4 presents the parameters used to create the graphic in Figure 5. Note that different size parameters have been used to suite the large amount of data. Here is the table presenting the different parameters.

Title
Independant Scale
Horizontal Scale
Vertical Scale
Label

Title of the graphic

No title

Determines if the graphic is vertical or horizontal

Location of the horizontal scale

Location of the vertical scale

Caption of the different elements in the legend

No legend

Color

Style

X

Y0

Y1-Y4

Colors used in the legend	Automatically selected
Border type used	Normal-FillStroke
Independant scale range	Required.
First dependant range	Required.
Additional dependant range	

The amount of elements in the Label, Color and Style ranges must be equal to the amount of Y ranges used. The amount of elements in the X range and all Y ranges must be the same.

# Math Results

Sheet containing the results for the math course

Title:

Math Results

Independant Scale:

Horizontal  Vertical

Horizontal Scale:

Bottom  Top

Vertical Scale:

Left  Right

Series:

label

B1:E1

color

, LightBlue, LightGreen, Red

style

x

A3:A18

y0

B3:B18

y1

C3:C18

y2

D3:D18

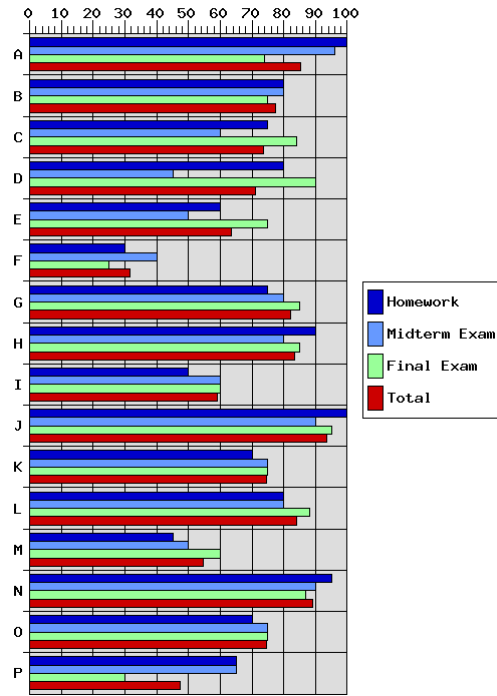
y3

E3:E18

y4

[show](#)

Math Results



# Spreadsheet JQ Charts

Another option is to make the charts reusing the [raphael.js charting library](#) embedded in the jquery spreadsheet.  
See:

Chart Type	Example
Vertical Bar	"=BARCHART(D2:D13)
Horizontal Bar	"=HBARCHART(D2:D13)



Chart

Data

Month

Year

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Jan

2001

---



Feb

2002

---

Pie

"=LINECHART(D2:D8, F2:F6)"

---

Line

"=PIECHART(D2:D8, E2:E8)"

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Mar 2003

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Apr 2004

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8.2 May 2005

---

9.1 Jun 2006

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14.1 Jul 2007

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16 Aug 2008

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17.9 Sep 2009

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22 Oct 2010

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30 Nov 2011

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32 Dec 2012

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