

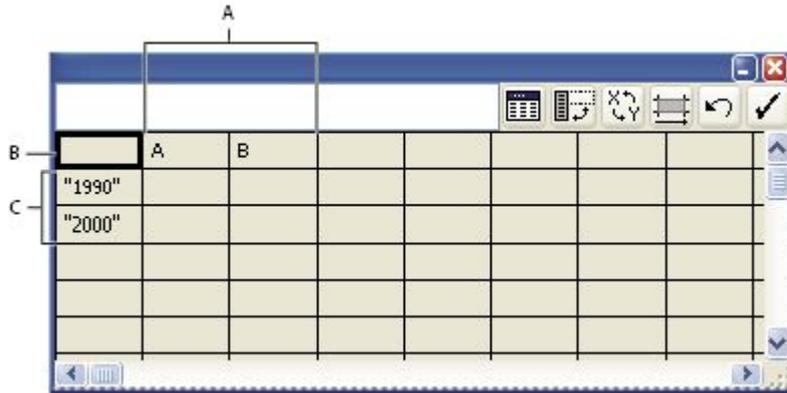
Illustrator Charts

Advanced options



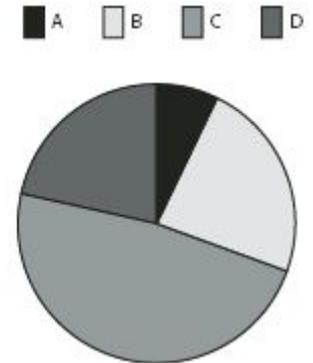
Setting up labels

Labels are words or numbers that describe two things: the sets of data you want to compare, and the categories across which you want to compare them. For column, stacked column, bar, stacked bar, line, area, and radar graphs, you enter labels in the worksheet as follows:



FOR PIE CHARTS

A	B	C	D
12.00	39.00	80.00	36.00



Format the graph's axes

1. Select the graph with the Selection tool.
2. Choose Object > Graph > Type, or double-click the graph tool in the Tools panel.
3. To change the position of the value axis, select an option from the Value Axis menu.
4. To format tick marks and labels, select an axis from the pop-up menu at the top of the dialog box, and set the following options:
 - **Tick Values:** Determines the placement of tick marks on value axes, left axes, right axes, bottom axes, or top axes. Select Override Calculated Values to manually calculate the placement of tick marks. Either accept the values set when you created the graph or enter a minimum value, a maximum value, and the number of divisions between labels.
 - **Tick Marks:** Determines the length of tick marks and number of tick marks per division. For category axes, select Draw Tick Marks Between Labels to draw tick marks on either side of the labels or columns, or deselect the option to center tick marks over the labels or columns.
 - **Add Labels:** Specifies a prefix and suffix for numbers on value axes, left axes, right axes, bottom axes, or top axes. For example, you can add a dollar sign or percent sign to axis numbers.

Format columns, bars and lines

1. Select the graph with the Selection tool.
2. Choose Object > Graph > Type, or double-click the graph tool in the Tools panel.
3. To adjust the space between columns and bars in a column, stacked column, bar, or stacked bar graph, enter a value between 1% and 1000% in the Column Width, Bar Width, or Cluster Width text box.

A value greater than 100% causes the columns, bars, or clusters to overlap one another. A value less than 100% leaves space between the columns, bars, or clusters. A value of 100% moves the columns, bars, or clusters flush against each other.

4. To adjust lines and data points in line, scatter, and radar graphs, set the Mark Data Points, Connect Data Points, Edge-to-Edge Lines, and Draw Filled Lines options.
5. To change how columns, bars, and lines overlap, set the First Row In Front and First Column In Front options.
Note: Always select First Column In Front for area graphs; if you do not, some areas may not appear.

General graph options

- **Value Axis:** Determines where the value axis (the axis that displays the unit of measurement) appears.
- **Add Drop Shadow:** Applies drop shadows behind the columns, bars, or lines in a graph, and to entire pie graphs.
- **Add Legend Across Top:** Displays the legend horizontally across the top of the graph instead of to the right of the graph.
- **First Row In Front:** Controls how the categories, or clusters, of data in a graph overlap when the Cluster Width is greater than 100%. This option is the most useful when working with column and bar graphs.
- **First Column In Front:** Places the column, bar, or line that corresponds to the first column of data in the Graph Data window on top. This option also determines which column is on top for column and stacked column graphs with a Column Width greater than 100% and for bar and stacked bar graphs with a Bar Width greater than 100%.
- **Mark Data Points:** Places square markers at each data point.
- **Connect Data Points:** Draws lines that make it easier to see relationships among data.
- **Edge-to-Edge Lines:** Draws lines that extend across the graph, from left to right along the horizontal (x) axis. This option is not available for scatter graphs.
- **Draw Filled Lines:** Creates a wider line according to the value you enter in the Line Width text box, and which fills the line with paint according to the specifications for that series of data. This option becomes available when you select Connect Data Points.

Add drop shadows

1. Select a graph with the Selection tool.
2. Choose Object > Graph > Type, or double-click the graph tool in the Tools panel.
3. In the Graph Type dialog box, select Add Drop Shadow, and click OK.

Change the position of a legend

1. Select a graph with the Selection tool.
2. Choose Object > Graph > Type, or double-click the graph tool in the Tools panel.
3. In the Graph Type dialog box, select Add Legend Across Top, and click OK.

Add pictures or symbols to graphs

You use *graph designs* to add illustrations to columns and markers. Graph designs can be simple drawings, logos, or other symbols representing values in a graph; they can also be complex objects that contain patterns and guide objects. Illustrator comes with a variety of preset graph designs. In addition, you can create new graph designs and store them in the Graph Design dialog box.

You can apply graph design to columns in several ways:

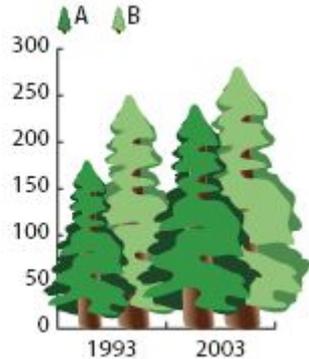
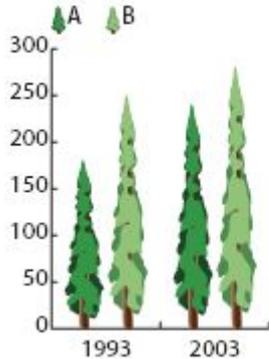
Add pictures or symbols to graphs

Vertically scaled design

Is stretched or compressed vertically. Its width does not change.

Uniformly scaled design

Is scaled both vertically and horizontally. The horizontal spacing of the designs is not adjusted for the different widths.

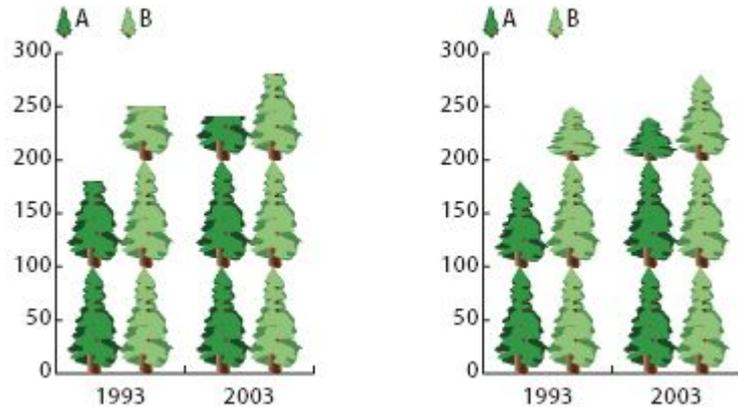


Vertically scaled graph design compared to uniformly scaled graph design

Add pictures or symbols to graphs

Repeating design

Stacks a design to fill the columns. You can specify the value that each design represents, as well as whether you want to chop or scale designs that represent fractions.

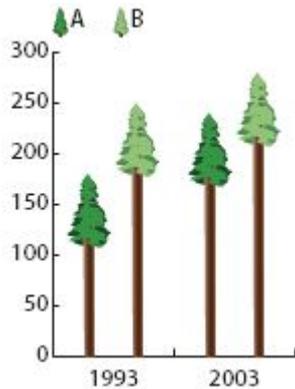


Repeating graph with chopped design compared to repeating graph with scaled design

Add pictures or symbols to graphs

Sliding design

Is similar to a vertically scaled design, except that you can specify where in the design to stretch or compress it. For example, if you were using a person to represent data, you might stretch or compress only the body, but not the head. Using the Vertically Scaled option would scale the entire person.



Import a column or marker design

1. Choose Window > Swatch Libraries > Other Library.
2. Do one of the following:
 - To import preset graph designs, navigate to the Cool Extras/Sample Files/Graph Designs folder inside the Illustrator application folder. Then select a graph designs file, and click Open.
 - To import graph designs from another document, select the document, and click Open.
 - Initially, all that appears is a new panel with colors, gradients, and patterns from the imported file. However, the imported graph designs will be available when you open the Graph Column or Graph Marker dialog box.

Create a column design

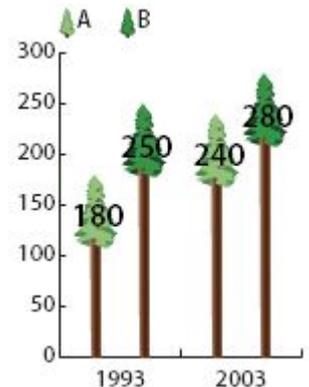
1. Create a rectangle as the backmost object in the design. The rectangle represents the boundary of the graph design. **Note:** Copy and paste the smallest column in your graph to use it as the bounding rectangle for your design.
 2. Paint the rectangle as desired, or fill and stroke it with None so that it is invisible.
 3. Create the design using any of the drawing tools, or position an existing design in front of the rectangle.
 4. Using the Selection tool , select the entire design, including the rectangle.
 5. Choose Object > Group to group the design.
 6. Choose Object > Graph > Design.
 7. Click New Design. A preview of the selected design appears. Only the portion of the design that fits inside the backmost rectangle is visible, but the whole design appears when used in the graph.
 8. Click Rename to name the design.
- Note: Creating a graph design is similar to creating a pattern.

Create a sliding column design

1. Create a rectangle as the backmost object in the design. This rectangle is the boundary for the graph design.
2. Create the design using one of the drawing tools, or place an existing design in front of the rectangle.
3. Use the Pen tool to draw a horizontal line to define where the design is to be stretched or compressed.
4. Select all parts of the design, including the horizontal line.
5. Choose Object > Group to group the design.
6. Use the Direct Selection tool or Group Selection tool to select the horizontal line. Be sure to select only the horizontal line.
7. Choose View > Guides > Make Guides.
8. Choose View > Guides > Lock Guides to remove the check mark next to Lock so you can unlock the guides. Move the design around to make sure that the guide moves with the design.
9. Use the Selection tool to select the whole design.
10. Choose Object > Graph > Design.
11. Click New Design. A preview of the selected design appears.
12. Click Rename to name the design.

Add totals to column design

1. Create the column design.
2. Select the Type tool . Position the pointer at a point where you want the value to appear, near or in the rectangle that defines the design. For example, you can place the value in, above, below, to the left, or to the right of the design.
3. Click and type a percent sign (%) followed by two digits from 0 to 9. The digits control how the data is displayed. The first digit determines how many places appear before the decimal point. For example, if your total was 122, a digit of 3 would display 122. If you enter 0 for the first digit, the program adds the number of places necessary for the value. The second digit determines how many places appear after the decimal point. Zeros are added as necessary, and values are rounded up or down as necessary. You can vary these numbers, depending on how many digits you need.
4. To change the type attributes, choose Window > Type > Character, specify the attributes you want, and close the panel.
5. To align the decimal points, choose Window > Type > Paragraph and click the Align Text Right button.
6. Using the Selection tool , select the entire design, including the rectangle and any type.
7. Choose Object > Group to group the design.
8. Choose Object > Graph > Design.
9. Click New Design. You see a preview of the selected design.
10. Click Rename to name the design.



Create a marker design

1. Select and copy a marker rectangle from the graph, and paste it where you're going to create your design. This will be the backmost object in your graph design and will establish the size of the marker.
2. Make the marker artwork the size you want it to be in the graph, even if it's larger than the marker rectangle you copied.
3. Once you've got the marker design the way you want it, select the design, choose Object > Graph > Design, and click New Design.
4. Click Rename to name the design.

Apply column design to a graph

1. Create or import the column design.
2. Use the Group Selection tool to select the columns or bars you want to fill with the design, or select the entire graph.
3. Choose Object > Graph > Column.
4. Select a column design type.
5. If you choose the Repeating Column Type, enter a value in the Each Design Represents text box. Also select whether to chop or scale any fractions of the design from the For Fractions pop-up menu. Chop Design cuts off a fraction of the top design as necessary; Scale Design scales the last design to fit in the column.
6. Select the design you want to use. A preview of the selected design appears.
7. Click OK.

Apply a marker design to a line or scatter graph

1. Create or import the column design.
2. Use the Group Selection tool to select the markers and the legends in the graph that you want to replace with a design. Do not select any lines.
3. Choose Object > Graph > Marker. Select a design, and click OK.
4. The design is scaled so that the backmost rectangle in the design is the same size as the default square marker on the line or scatter graph.

