## Chart basics

IN
1 of 4

## Overview

To analyze and interpret a spreadsheet and present spreadsheet information to others, you can create and print various types of charts. Whenever you change the spreadsheet entries a chart is based on, Works updates the chart automatically.

## Related information

- Lesson: Charting
$>=$ Introducing Works tools


## Chart basics

## 4 2 of 4

## Chart uses

Charts give you graphic views of your spreadsheet. For example, you can use charts to:

## Related information

Chart types
Introducing Works tools

## Chart basics

## - 3 of 4

## Basic parts of a chart

Working with charts is easy when you learn their basic parts. You can hide, show, or edit most parts of a chart to present your information in the way you want.

For information about hiding, showing, or editing various parts of a chart, see Changing a Chart.

## Related information

Lesson: Charting

## Chart basics

## Charts and other Works tools

You can copy a chart to a Works Word Processor document, for example to include it in a letter or memo. You can also link a chart to a Word Processor document, so that whenever the information in the chart or its spreadsheet changes, it changes automatically in your Word Processor document.

Note: You cannot copy a chart to the Database or copy information from the Database directly to a chart. To chart information from the Database, you must first put the information into a spreadsheet.

## Related information <br> Copying a chart to the Word Processor <br> $>$ Linking a chart to another application

## Overview

You can create several different types of charts. Each type emphasizes different aspects of your spreadsheet information. You can change a chart from one type to another or you can combine chart types. Each chart type has several variations to choose from.

Related information
Creating a new chart

## Chart types

## 2 of 13

## Bar chart

Bar charts show the differences between various categories of information. Each row or column of spreadsheet numbers appears as a set of bars with the same pattern or color.

If the top-most row or left-most column of the highlighted area contain text, their entries become category labels and legend text, respectively. Dates always become category labels. more...

## Chart types

- 3 of 13

Bar chart, cont.
There are five variations of bar chart to choose from:

## Related information

Combining chart variations
Creating a custom chart

## Chart types <br> - 4 of 13 <br> -

Line chart
Line charts show trends or changes in information. Each line represents a row or column of numbers from your spreadsheet.
more...

## Chart types <br> 5 of 13 <br> -

Line chart, cont.
There are six variations of line chart to choose from:

## Related information

Combining chart variations

## Chart types <br> 

Pie chart
Pie charts show percentage breakdowns. Each pie wedge represents an individual value; the whole pie represents one spreadsheet row or column. Highlighted text becomes data labels.
more...

## Chart types <br> 7 of 13 <br> $>$

Pie chart, cont.
There are six variations of pie chart to choose from:

## Related information

Combining chart variations
Creating a custom chart

## Chart types <br> 8 of 13

Stacked line chart
In a stacked line chart, the lines are stacked or combined to show the total in each category. Each line's values are added to those of the line below.
more...

## Chart types <br> 9 of 13

## Stacked line chart, cont.

There are four variations of stacked line chart to choose from:

## Related information

Combining chart variations
Creating a custom chart

```
Chart types
    10 of 13
```


## XY (scatter) chart

An XY chart is similar to a line chart, but instead of plotting values along only the vertical ( Y ) axis, XY charts show numerical values along both the vertical $(Y)$ and horizontal $(X)$ axis. XY charts are typically used for plotting experimental data or plotting any two sets of numbers.

```
Chart types
    11 of 13
*
XY (scatter) chart, cont.
```

There are six variations of XY (scatter) chart to choose from:

## Related information

Combining chart variations
Creating a custom chart

```
Chart types
    12 of 13
```

Combination chart
A combination chart combines various chart types to display your information in additional ways. For example, you can combine lines and bars to show individual values and averages in one chart.
more...

```
Chart types
    13 of 13
```

Combination chart, cont.

There are four variations of combination chart to choose from:

## Related information

Combining chart variations
Creating a custom chart

## Creating and deleting a chart <br> 1 of 7

## Overview

You open a spreadsheet to create a chart. Each spreadsheet can have up to eight charts associated with it. Works automatically updates each chart whenever you change the spreadsheet.

## Related information

Lesson: Charting

## Creating and deleting a chart <br> 2 of 7

## Creating a new chart

Each chart uses numbers from a spreadsheet range, which can extend up to six cells in one direction and as far as you want in the other. In addition, you can include a row and a column of text that Works will use to create category labels and a legend, respectively.

## Creating and deleting a chart <br> 3 of 7

Creating a new chart, cont.
If the highlighted range contains an equal number of columns and rows, or if it contains more columns than rows, each row of numbers in the range becomes a value $(Y)$ series. The first row is the first value series, the second row is the second value series, and so on up to six value series.

## Creating and deleting a chart 4 of 7 <br> $>$

## Creating a new chart, cont.

If the highlighted range contains more rows than columns, each column of numbers in the range becomes a value $(\mathrm{Y})$ series. The first column is the first value series, the second column is the second value series, and so on up to six value series.

Works uses text in the first highlighted column for the category labels and the entries in the row for the legend. Dates always become category labels.

## How to

夷 Create a new chart

## Creating and deleting a chart <br> 5 of 7

## Opening existing charts

Each spreadsheet can have up to eight charts associated with it. A spreadsheet's charts are saved with the spreadsheet. Charts are not independent files with their own filenames.

You can see what charts a spreadsheet has by opening the spreadsheet and looking at the Chart menu. Any charts that have been created from the spreadsheet are listed on the Chart menu.

## How to

带
Open an existing chart

## Creating and deleting a chart 6 of 7

## Naming and saving charts

When you create a spreadsheet's first chart, Works automatically names it Chart1, the second Chart2, and so on, and adds each to the Charts menu. A chart's name also appears in the title bar of the chart's window, following the name of the spreadsheet, for example, SALES.WKS - Chart1. You can rename a chart once you've created it.

You save all the charts associated with a spreadsheet when you save the spreadsheet. Charts are not independent files with their own filenames. You don't need to save them separately.

## How to

* Rename a chart


## Related information

Adding and deleting titles

## Creating and deleting a chart <br> 7 of 7

## Deleting a chart

You can delete a chart from a spreadsheet. For example, if you already have defined the maximum of eight charts for a spreadsheet and want to create an additional chart, you must delete an existing chart to make room for the new one.

## How to

夷
Delete a chart
Related information
Duplicating a chart

```
Changing a chart
    1 of }1
>
```


## Overview

Once you have created a chart, you can change the way it displays the spreadsheet information: the chart type, category $(X)$ and value $(Y)$ series, category labels, legend, and scales.

Related information
Lesson: Charting
Changing chart appearance
Creating a custom chart

## Changing a chart



## Changing the chart type

You can change a chart to any of six chart types: bar, line, pie, stacked line, XY (scatter), or combination. Within each type, you can choose from several variations.

If you are not sure which type of chart you want, see Chart Types.

## How to

央 Change the chart type
Related information
Creating and deleting a chart

## Changing a chart

3 of 10

## Changing a series

After you create a chart, you may find that the information is not displayed in just the way you expected. The value $(Y)$ series might be out of order, or you may want to switch the category $(X)$ series with the value $(Y)$ series.

You can also edit a series by changing the spreadsheet entries the chart is based on.

## How to <br> + Change a series <br> Related information

Creating a custom chart
Creating and deleting a chart

## Changing a chart <br> - 4 of $\mathbf{1 0}$

## Changing the legend

A chart's legend is like the legend on a map; it tells you what the colors, patterns, and markers mean. When a chart contains information from two or more rows and columns, including a legend will make the chart easier to read and interpret.

You can add, delete, or change legends.
more...

-

## Changing the legend, cont.

You can show or hide a legend, without deleting or changing it in any way, while you view or print a chart.

## How to

$\rightarrow$ Change the legend

* Delete the legend
* Hide or show the legend


## Related information

Adding titles and labels
Changing chart appearance


## Changing category labels

When you create a chart, Works automatically adds category labels if you highlighted either a row or a column of text. The exception to this is pie charts, which have no category labels.

To change category labels, you assign a new spreadsheet range to the chart's category ( X ) series. Each entry in the range becomes a category label.

## Changing a chart

7 of $\mathbf{1 0}$

## Changing category labels, cont.

One way to simplify a chart is to display only some of the category labels. For example, if your chart has 24 categories identifying months, you might want to change the frequency of the labels so that only every sixth label is displayed.

## How to

* Change category labels
- Delete category labels

Change the frequency of category labels

## Related information

Adding titles and labels

## Changing a chart <br> 8 of 10

## Changing scales

A scale is a set of numbered marks measuring values along the vertical ( Y ) or horizontal $(\mathrm{X})$ axis. A scale has a minimum value, a maximum value, and an interval between the marks. You can change the horizontal ( X ) axis scale only on X-Y (scatter) charts.

When you create a chart, Works automatically determines an appropriate scale for the values along each axis. You can change the emphasis or improve the appearance of a chart by changing a scale's minimum, maximum, or interval value.

## Changing a chart <br> 9 of 10

## Changing scales, cont.

Vertical (Y) axes use one of two types of scales: standard (linear) or logarithmic. A logarithmic scale is useful when the range of values is large or when you want to show a logarithmic relationship.

## Changing a chart <br> 10 of 10

## Changing scales, cont.

On a standard scale, the interval is the amount Works adds to each number on the scale to determine the next number. On a logarithmic scale, the interval is the amount by which Works multiplies each number to determine the next number.

You can use logarithmic scales in all chart types except pie charts.

## How to

## Change scales

## Related information

Creating a custom chart
Adding or deleting a right vertical ( Y ) axis

## Overview

You can add different kinds of titles and labels to a chart to clarify and explain your chart's information.

## Related information

Changing a chart

```
Adding titles and labels
    2 of 3
```


## Adding and deleting titles

You can refine and clarify a chart by using a descriptive title, a subtitle, and axis titles. For example, axis titles can identify the units of measure for the scales, or help in interpreting the chart.

Note: A pie chart has only a title and subtitle.

## How to <br> Add or change a title, subtitle, or axis title Delete a title, subtitle, or axis title

## Related information

Adding and deleting a right vertical $(Y)$ axis

## Adding titles and labels

## 3 of 3

## Adding and deleting data labels

Data labels are text or numbers from a spreadsheet that identify information in a chart.

To create data labels, you assign cells from a spreadsheet to use as labels.
How to
Add or change data labels
Add or change pie chart data labels
Delete data labels
Delete pie chart data labels

## Related information

$>$ Combining chart variations

## Copying and duplicating

## 1 of 4

## Overview

You can create additional charts based upon an existing chart by duplicating the existing chart and then modifying the duplicates. You can also copy a chart to the Works Word Processor and link the copy to its original chart.

For information about copying and linking a chart to another Windows application, see Sharing with Other Applications.

## Related information

Lesson: Sharing information
Sharing with other applications
Creating a new chart

## Copying and duplicating

## - 2 of 4

## Duplicating a chart

When you want to create a chart based on an existing one, you can duplicate the existing chart and then modify the duplicate.

For example, you can use a duplicate of an existing chart to experiment with format changes, or to create a series of charts emphasizing different aspects of the same information.

## How to

## Duplicate a chart

## Related information

- Changing a chart


## Copying and duplicating

## 3 of 4

## Copying a chart to the Word Processor

You can copy a chart to a Word Processor document. For example, you could copy a chart of stock prices to illustrate a memo you're preparing. For more information about copying to the Word Processor, see Copying between Works Tools.

Both the Word Processor document and the Spreadsheet document must be open in order to copy a chart.

## Copying and duplicating

## 4 of 4

## Copying a chart to the Word Processor, cont.

When you copy a chart to the Word Processor, you can also link the copy to the original chart. If you link a copied chart, when you change the original chart the copy is updated automatically in your Word Processor document. For more information on linking a chart to a Word Processor document, see Linking to a Works Spreadsheet.

## How to <br> Copy a chart to the Word Processor

## Related information

Copying between Works tools

```
Creating a custom chart
    1 of 4
```


## Overview

You can create various custom chart types to make your chart easier to read, to increase the information content of your chart, or to display information that would otherwise require two different types of charts.

## Related information

Changing a chart
Chart types
Changing chart appearance

```
Creating a custom chart
    2 of 4
*
```


## Mixing lines and bars

Depending on the type of information you are working with, you may want to show some information as lines and other information as bars. For example, you could combine lines and bars to show both individual values and averages in one chart.

You can combine any of the bar chart variations with any of the line chart or stacked line chart variations. See Combining Chart Variations.

## How to

Mix lines and bars

## Related information

Changing the chart type
Combining chart variations
Changing a series

## Creating a custom chart <br> 3 of 4

## Adding or deleting a right vertical ( $\mathbf{Y}$ ) axis

You can add a right vertical $(\mathrm{Y})$ axis and use it to measure the information from one or more of the value $(\mathrm{Y})$ series.

Adding an identical right vertical $(Y)$ axis (one that measures the same information at the same scale as the left vertical $(\mathrm{Y})$ axis) can make your chart easier to read. Adding a right vertical $(\mathrm{Y})$ axis that uses a different scale or unit of measure can increase the information content of the chart.

```
How to
Add a right vertical (Y) axis
Delete a right vertical (Y) axis
```


## Related information

Changing a series
Changing scales


## Combining chart variations

You can combine two chart variations in one chart. For example, a chart can contain standard bars measured along the right vertical $(\mathrm{Y}$ ) axis and stacked bars or $100 \%$ bars measured along the left vertical ( Y ) axis.

After assigning value ( Y ) series to the left and right vertical $(\mathrm{Y}$ ) axes, you can choose the chart variation for each.
Note: You can combine variations with bar and line charts only.

## How to <br> Combine chart variations

## Related information

Changing the chart type
Changing a series

```
Changing chart appearance
    1 of 6
*
```


## Overview

There are various ways you can improve the appearance or change the emphasis of your chart without changing the information it displays or its structure.

## Related information

Changing a chart

## Changing chart appearance

2 of 6
$>$

## Changing colors, patterns, and markers

When you create a chart, Works automatically assigns a different set of colors, patterns, and markers to each set of bars, lines, or pie slices. You can refine the appearance of a chart by changing the colors, patterns, and markers.

For example, you can highlight a group of bars by combining a color and a pattern, or clarify a line chart by using dashed or dotted lines. In a pie chart, you can emphasize a pie slice by separating it from the other slices.

## How to <br> Change colors, patterns, and markers

## Changing chart appearance

3 of 6

## Adding and deleting gridlines

Vertical ( Y ) axis gridlines extend horizontally from the left or right vertical $(\mathrm{Y})$ axis. Horizontal $(\mathrm{X})$ axis gridlines extend vertically from the horizontal ( X ) axis. You can often make the information in your chart easier to read by adding horizontal gridlines, vertical gridlines, or both.

## How to <br> Add or delete gridlines

## Related information

- Changing a chart


## Changing chart appearance <br> 4 of 6 <br> $>$

## Changing fonts and styles

You can choose from various fonts to display and print the text and numbers in a chart. You can specify one font for the chart's title and another for all the other text and numbers, including the chart's subtitle, axis titles, and legend.

The fonts available to choose from are determined by the printers you are using.

How to<br>Change the font or style of a title<br>Change the font or style of other text and numbers<br>Related information<br>$\rightarrow \quad$ Changing a chart

## Changing chart appearance <br> 5 of 6

## Color or black-and-white display

If you have a color monitor, charts normally appear in color. You can display a chart in black-and-white when you want to see how it will appear when printed on a black-and-white printer.

When you display a chart in black-and-white or print it on a black-and-white printer, Works translates each color into a unique pattern.

## How to

Change between color and black-and-white display

## Changing chart appearance <br> - 6 of 6

## Adding and deleting a border

You can refine the appearance of a chart by adding a rectangular border around it.

Adding a border is especially useful when you copy a chart to a word processor document. The border can help set the chart apart from surrounding text.

## How to <br> Add or delete a border

Related information
> Changing a chart

```
Headers and footers
1 of 6
```


## Overview

To add text that prints at the top or bottom of every page, such as a title, date, or page number, you can create a header and footer.

## Related information

Lesson: Page layout and printing
Changing the page layout
Printing

## Headers and footers <br> 2 of 6

## Creating a header or footer

You can create a one-line header or footer that typically contains a page number, title, or date.

When you create a header or footer, you can use codes to change the alignment of text or to have Works automatically insert the filename, page number, or current date or time. Until you change the alignment, Works automatically centers headers and footers.
more...

```
Headers and footers
* of }
```



```
Creating a header or footer, cont.
To
``` Type

\author{
more..
}
```

Headers and footers
4 of 6

```


\section*{Creating a header or footer, cont.}

To
Type
```

Headers and footers
5 of }
>

```

\section*{Creating and deleting a header and footer, cont.}

To Type

Notes:
- The text for a header or footer is not displayed in your document, but you can see it when you preview or print your spreadsheet.
- If you number the pages, you can set the starting page number. For example, if you want to combine several spreadsheets into one document, you can set the starting page number for each spreadsheet so that the pages are numbered consecutively.

\author{
How to \\ Create a header or footer \\ Delete a header or footer \\ Change the starting page number
}
```

Headers and footers

* of 6

```

\section*{Adjusting header and footer margins}

To control where a header or footer prints on the page, you can set the header and footer margins. Works initially proposes 0.5 inches for the header margin and 0.75 inches for the footer.

\section*{How to}

Adjust the header or footer margin
Related information
Previewing
Changing the page layout
```

Changing the page layout
1 of 4

```

\section*{Overview}

Before you print a chart, you can lay out the printed page the way you want by specifying its size, orientation, and margins.

\section*{Related information}

Lesson: Page layout and printing
Printing
Changing chart appearance

\section*{Changing the page layout \\ 2 of 4}

\section*{Changing the page size and orientation}

You can print your chart on paper of different sizes, and in portrait (vertical) or landscape (horizontal) orientation. Works is preset to print on letter-sized 8.5-by-11-inch paper in portrait orientation.

Not every printer can print text in landscape orientation. If you are not sure about your printer, check your printer manual. Note also that changing orientation affects how fonts are displayed throughout Works. Change orientation back after you are through printing, or fonts may not be displayed correctly in other Works tools.

\section*{Changing the page layout}

3 of 4

\section*{Adjusting page margins}

You can control the size of the printed area by increasing or decreasing the margins of the printed page. When you prepare to print a chart, you can accept the preset page margins or change them.

If you have added a header or footer, make sure that the header margin is smaller than the top page margin and the footer margin is smaller than the bottom page margin.

\section*{How to}
- Adjust page margins

\section*{Related information}

P Printing
```

Changing the page layout
4 of 4

```


\section*{Changing the printed chart size}

When you print a chart, Works normally fills the printed page, adjusting the chart's proportions as necessary. You can change the way Works prints a chart.

You can print a chart so that it fills the page while keeping the chart's proportions. Or you can print the chart at the size it appears on the screen.

\section*{How to}

Change the printed chart size

\section*{Related information}

\section*{Printing}

\section*{Previewing}

\section*{1 of 1}

\section*{Overview}

You can see how your chart will look when printed by previewing it. Margins, page numbers, headers, and footers all appear in their correct locations in print preview.

\author{
How to \\ Preview a chart \\ Related information \\ Lesson: Page layout and printing \\ Printing \\ Changing the page layout
}
```

Printing
1 of 3

```

\section*{Overview}

Before you print, you can preview your chart to see what the printed page will look like. When you are ready to print, you can print on a variety of printers, including a plotter.

\section*{Related information}

\author{
Lesson: Page layout and printing \\ Color or black-and-white display \\ Changing colors, patterns, and markers \\ Changing fonts and styles
}
```

Printing
2 of 3

```

\section*{Printing a chart in black-and-white}

When you print, Works translates the chart's colors into black-and-white patterns (unless you have a plotter or other color printer). You can change the colors and patterns before you print. For information, see Changing Colors, Patterns, and Markers.

Note: You may want to change the font you've chosen to adjust the way text looks on the printed page. For more information, see Changing the Font and Style.

\section*{How to \\ Print a chart}

\section*{Related information}

Changing the font and style
Changing colors, patterns, and markers
```

Printing
3 of 3

```

\section*{Printing a chart in color}

If you have a plotter or other color printer, you can print charts in color. You can change the chart's colors in Works or by changing pens on the plotter.

When using a plotter, a slower pen speed will produce a higher quality chart. Slow pen speed is especially useful when printing on transparencies or when the plotter pens are somewhat dry.

\section*{How to}
\(\rangle \quad\) Print a chart
Related information
Changing colors, patterns, and markers

\section*{Sharing with other applications \\ 1 of 3}

\section*{Overview}

You can copy a chart to another Windows application. The copy can be either linked or unlinked.

For information about copying and linking a chart to a Works Word Processor document, see Linking to a Works Spreadsheet.

\section*{Related information}

Linking to a Works Spreadsheet
Copying and duplicating

\section*{Sharing with other applications}

2 of 3

\section*{Copying a chart to another application}

You can copy a chart to another Windows application. For example, you can insert a chart from Works into a Microsoft Word for Windows document.

A chart you copy to another application can be linked to the original. For more information, see Linking a Chart to Another Application.

\section*{How to}
- Copy a chart to another application

Related information
Copying a chart to the Works Word Processor

\section*{Sharing with other applications \\ 3 of 3}
\(\rightarrow\)

\section*{Linking a chart to another application}

When you copy a chart to a document in another Windows application, you can link the copy to the original.

The capabilities and procedures for linking vary with each particular Windows application. For more information, see the manual for the application you want to link to.

\section*{How to}
\(\rightarrow \quad\) Link a chart to another application

\section*{Related information}

Lesson: Sharing information
Linking to a Works Spreadsheet

\section*{Main Topic \\ Print \\ Size Works}

\section*{To create a new chart}

1 In your spreadsheet, highlight a range of numbers (up to six cells in one direction and any number of cells in the other), plus any words and numbers that label the range.
2 On the Toolbar, choose the New Chart button.
--Or--
From the Charts menu, choose Create New Chart.
3 Works creates a new chart and displays it in its own window.
Works initially creates a bar chart. To create a different kind of chart, see Changing the Chart Type.

\section*{what if.}
- The legend or some of my labels appear incomplete on the chart?

There is not enough room on the chart to display all the text. You need to edit the text or make the chart window larger.
-
I want the chart to display my information so that the category labels and legend text are interchanged? You need to edit the category (X) series and legend text, or highlight your spreadsheet information differently. For information, see Changing a Series and

\section*{Main Topic Print \\ Size Works}

\section*{To open an existing chart}

1 Open or switch to the spreadsheet whose chart you want to open.
2 From the Charts menu, choose the chart you want to open.
Works opens the chart and displays it in its own window.
A check mark is displayed on the menu beside the name of the active chart.

\section*{-}

\section*{Main Topic Print \\ Size Works}

\section*{To rename a chart}

1 Open or switch to the spreadsheet whose chart you want to rename.
2 From the Charts menu, choose Name.
3 Choose the name you want to change.

4 Type a new name, up to 15 characters long. Chart names can include spaces.
5 Choose Rename.
6 To rename another chart, repeat steps 3 through 5.
7 Choose OK.
Works displays the new name on the Charts menu.

\section*{Main Topic Print \\ Size Works}

\section*{To delete a chart}

1 Open or switch to the spreadsheet whose chart you want to delete.
2 From the Charts menu, choose Delete.
3 Choose the chart you want to delete.

4 Choose Delete.
5 If you want to delete another chart, repeat steps 3 and 4.
6 Choose OK.
\(\rightarrow\)

To change the chart type
1 On the Toolbar, click the chart type you want.
--or--
From the Gallery menu, choose the chart type you want.
2 Click to choose the variation you want.
--or--
Press the key for the variation number you want.

Note: To see the next or previous chart type, choose Next or Previous.
3 Choose OK.
Works changes the active chart and places a check mark beside the chart type on the Gallery menu.

\section*{To change a series}

1 From the Edit menu, choose Series.
2 Edit the range references for any of the value ( \(Y\) ) series you want to change, or for the category (X) series.

Note: If you highlight and copy a range in your spreadsheet before you choose Series, you can choose the Paste button and Works will insert the copied range reference at the insertion point.
3 Choose OK.
Works updates the chart according to the changes you made.

To delete a series
1 From the Edit menu, choose Series.
2 Highlight the range reference for the series you want to delete.

3 Press the DEL key.
4 Choose OK.
Works delete the series from the chart.
\(>\)

To change the legend
1 From the Edit menu, choose Legend.
2 In the appropriate box, type the legend text or the cell reference of the spreadsheet cell whose entry you want to use in the legend.

For example, to use the text of cell B2 for the 2nd value (Y) series in the legend, type B2 in the 2 nd Value Series box.

3 Choose OK.
\(\stackrel{\rightharpoonup}{*}\)
Some of the text in the legend appears incomplete in the chart?
There is not enough room in the chart to display all the text. You need to edit the text or make the chart window larger.
\(>\)

To delete the legend
1 From the Edit menu, choose Legend.
2 Delete the text or cell references in all the Value Series boxes.

3 Choose OK
\(>\)

\section*{To hide or show the legend}
- From the Format menu, choose Show Legend. Works hides the chart's legend and removes the check mark from beside the command on the menu.

To show the legend again, choose Show Legend again.

\section*{To change category labels}

1 From the Edit menu, choose Series.
2 In the Category (X) Series box, type the range reference for the entries you want to use as category labels.

Note: If you highlight and copy a range in your spreadsheet before you choose Series, you can choose the Paste button and Works will insert the copied range reference at the insertion point.
3 Choose OK.

The text of the category labels appears incomplete on the chart? There is not enough room in the chart to display all the text. You need to edit the text or make the chart window larger.
- The category labels overlap?

You can change their frequency, displaying only some of the category labels. See Changing the Frequency of Category Labels.

\section*{7 is}

You can also copy a range from the spreadsheet, switch to the chart, and choose Paste Series from the Edit menu. Works will ask what series you want to replace.

To delete category labels
1 From the Edit menu, choose Series.
2 In the Category (X) Series box, highlight the range reference.

3 Press the DEL key.
4 Choose OK.
\(>\)

To change the frequency of category labels
1 From the Format menu, choose Horizontal (X) Axis.
2 In the Label Frequency box, type the interval you want between the category (X) series entries displayed as category labels.

For example, type \(\mathbf{1 2}\) to display only every twelfth category (X) series entry as a category label.
3 Choose OK.

\section*{To change scales}

1 From the Format menu, choose Vertical ( \(Y\) ) Axis to change a left vertical ( \(Y\) ) axis scale.
--Or--
From the Format menu, choose Right Vertical (Y) Axis to change a right vertical (Y) axis scale.
2 If you want to use a logarithmic scale, choose the Use Logarithmic Scale check box.

3 In the Minimum box, accept the Auto setting or type a number.
4 In the Maximum box, accept the Auto setting or type a number.
5 In the Interval box, accept the Auto setting or type a number.
6 Choose OK.
Note: With a logarithmic scale, the number you type for Minimum, Maximum, and Interval must be a power of ten, such as \(1 / 10,1,10,100\), or 1000 . The Interval must not be less than 10.

To add or change title, subtitle, or axis title
1 From the Edit menu, choose Titles.
2 In the appropriate box, type the text of the title or a cell reference of the spreadsheet cell whose entry you want to use as a title.

Note: Since pie charts do not have a vertical (Y), right vertical (Y), or horizontal (X) axis, pie charts do not have titles for these axes.
3 Choose OK.
\(\stackrel{\rightharpoonup}{*}\)
The text of a title appears incomplete on the chart?
There is not enough room on the chart to display all the text. You need to edit the text or make the chart window larger.
\(>\)

To delete a title, subtitle, or axis title
1 From the Edit menu, choose Titles.
2 Highlight the text or cell reference of the title you want to delete.
For example, to delete a horizontal ( X ) axis title, highlight the text or cell reference in the Horizontal ( X ) axis box.

3 Press the DEL key.
4 Choose OK.

To add or change data labels
1 From the Edit menu, choose Data Labels.
2 Choose the Use Series Data check box to automatically create data labels for all the chart's series. --Or--

Under Value \((Y)\) Series, type the range references for only those series you want to label.

Note: If you highlight and copy a range in your spreadsheet before you choose Data Labels, you can choose the Paste button and Works will insert the copied range reference at the insertion point.
3 Choose OK.

To add or change pie chart data labels
1 From the Edit menu, choose Data Labels.
2 In the 1st Label box, choose the option you want for the first label.

Choose Values to label pie slices with the values (numbers) the slices represent.
Choose Percentages to label each slice with its percentage of the whole pie.
Choose Cell Contents to label each slice with the cell's contents (if different from its value); for example, a formula.
Choose \(1,2,3, \ldots\) to label each slice in numerical order.
Choose None for no first label.
3 In the (2nd Label) box, choose an option if you want a second label.
Second labels appear in your chart in parentheses beside the first labels.
4 If you want to use a different range of entries for the labels than is used for the pie chart itself, enter the range reference in the Cell Range box.

Note: If you highlight and copy a range in your spreadsheet before you choose Data Labels, you can place the insertion point in the Cell Range box, and then choose the Paste button. Works will insert the copied range reference.

5 Choose OK.

To delete data labels
1 From the Edit menu, choose Data Labels.
2 Clear the Use Series Data check box.
--Or--
Under Value (Y) Series, delete the range references for those series you do not want to label.

3 Choose OK.
\(>\)

To delete pie chart data labels
1 From the Edit menu, choose Data Labels.
2 Choose the None option in both the 1st Label and (2nd Label) boxes.

3 Choose OK
\(>\)

\section*{To duplicate a chart}

1 From the Charts menu, choose Duplicate.
2 In the Charts box, choose the chart you want to duplicate.

3 Type a name for the duplicate or Works will name it by adding a number to the name of the original chart.
4 Choose Duplicate.
5 If you want to duplicate another chart, repeat steps 2 through 4.
6 Choose OK.

To copy a chart to the Word Processor
1 Open the chart you want to copy.
2 Size the chart's window so that the chart is the size you want it to be in your Word Processor document.
3 From the Edit menu, choose Copy
--or--
Press CTRL+C.
4 Open the Word Processor document you want to copy to.
5 Move the insertion point to the place you want to copy to.
6 From the Edit menu, choose Paste.
--or--
Press CTRL+V.
Works places a copy of the chart in the Word Processor document.
\(\stackrel{\rightharpoonup}{ }>\)
I want to place a black-and-white copy of the chart in my Word Processor document?
1 Choose Paste Special, rather than Paste, in step 6, above.
2 Choose MS Works Chart from the Data Type box.
3 Choose Paste.
\(\rightarrow\)

To copy a linked chart to the Word Processor
1 Open the chart you want to copy.
2 Size the chart's window so that the chart is the size you want it to be in your Word Processor document.
3 From the Edit menu, choose Copy
--or--
Press CTRL+C.
4 Open the Word Processor document you want to copy to.
5 Move the insertion point to the place you want to copy to.
6 From the Edit menu, choose Paste Special.
7 Choose MS Works Chart from the Data Type box.

8 Choose Paste Link.
Works places a linked, color copy of the chart in the Word Processor document.
\(\stackrel{\rightharpoonup}{*}\)
I want to place a black-and-white, linked copy of the chart in my Word Processor document?
You can only place an unlinked, black-and-white copy of a chart in a Word Processor document.
Choose Paste, rather than Paste Link, in step 8, above.

3

\section*{To mix lines and bars}

Note: You cannot mix lines and bars in pie or X-Y (scatter) charts.
1 From the Format menu, choose Mixed Line \& Bar.
2 In each Value (Y) Series box, choose either Line or Bar.

3 Choose OK.
\(>\)

To add a right vertical \((\mathbf{Y})\) axis
1 From the Format menu, choose Two Vertical (Y) Axes.
2 In the Value Series boxes, choose one or more value \((Y)\) series you want to assign to the right vertical \((Y)\) axis.

3 Choose OK.
Works displays a right vertical \((Y)\) axis on the chart. The scale of the axis corresponds to the values of the value (Y) series you assigned to it.

\section*{Tipx}
- Make sure that the values of the value (Y) series you assign to each vertical \((\mathrm{Y})\) axis are compatible. For example, don't assign a value ( Y ) series of interest rates and a value \((\mathrm{Y}\) ) series of sales figures to the same vertical (Y) axis.

If you want both vertical \((\mathrm{Y})\) axes to have the same scale, assign similar ranges of values to each. You may also have to edit one of the scales. For information, see
Changing Scales.

To delete a right vertical ( \(\mathbf{Y}\) ) axis
1 From the Format menu, choose Two Vertical (Y) Axes.
2 In all the Value Series boxes for your chart, choose Left.

3 Choose OK.
Works removes the right vertical \((\mathrm{Y})\) axis from the chart.
-

To combine chart variations
Note: You can combine chart type variations with bar and line charts only.
1 Add a right vertical ( \(Y\) ) axis if your chart doesn't already have one.
2 From the Format menu, choose Vertical (Y) Axis.
3 In the Type box, choose which chart variation you want for those value (Y) series you have assigned to the left vertical ( Y ) axis.

4 Choose OK.
Works displays the value ( Y ) series assigned to the left vertical ( Y ) axis in the variation you chose.
5 From the Format menu, choose Right Vertical Axis.
6 In the Type box, choose which chart variation you want for those value ( Y ) series you have assigned to the right vertical (Y) axis.
7 Choose OK.
Works displays the value \((\mathrm{Y})\) series assigned to the right vertical \((\mathrm{Y})\) axis in the variation you chose.
\(>\)

To change colors, patterns, and markers
1 From the Format menu, choose Patterns \& Colors.
2 In the Series box, choose the value (Y) series you want to change.

3 In the Colors box, choose a color.
4 In the Patterns box, choose a pattern.

5 For a line chart, in the Markers box, choose a marker style.
6 Choose Format.
--or--
Choose Format All to apply your choices to all the value ( Y ) series.
7 Repeat steps 2 through 6 for any other value \((Y)\) series you want to change.
8 Choose Close.
\(\stackrel{\rightharpoonup}{ }\)

To change colors, patterns, and markers in a pie chart
1 From the Format menu, choose Patterns \& Colors.
2 In the Slices box, choose the pie slice you want to change.

3 In the Colors box, choose a color.
4 If you want to separate the slice from the pie, choose the Explode Slice check box.
5 In the Patterns box, choose a pattern.

6 Choose Format.
--or--
Choose Format All to apply your choices to all pie slices.
7 Repeat steps 2 through 6 for any other slices you want to change.
8 Choose Close.
\(\rightarrow\)

To add or delete gridlines
1 To add vertical gridlines, from the Format menu, choose Horizontal (X) Axis.
--Or--
To add horizontal gridlines, from the Format menu, choose Vertical (Y) Axis or Right Vertical Axis.
Note: If you turn on gridlines for both vertical \((Y)\) axes, left axis gridlines take precedence over right axis gridlines.
2 Choose the Show Grid Lines check box to add gridlines.
--Or--
Clear the check box to delete gridlines.

3 Choose OK.
\(\geqslant\)

To change the font or style of a title
1 From the Format menu, choose Title Font.
2 In the Font box, choose a font.

3 In the Size box, choose a point size.
4 If you want to add a character style, such as bold or italic, choose one or more styles in the Style box.
5 Choose OK.
-
The font or size I want inn't listed?
The fonts and sizes you see listed are determined by the printer you are using. If your printer doesn't support the font or size you want to use, you may be able to add additional fonts. For information on adding fonts, see your printer's documentation.
fio
The font and size you choose affects the amount of text a chart can display in a title. For longer titles, choose a proportional font and a small point size.

To change the font or style of other text and numbers
1 From the Format menu, choose Other Font.
2 In the Font box, choose a font.

3 In the Size box, choose a point size.
4 If you want to add a character style, such as bold or italic, choose one or more styles in the Style box.
5 Choose OK.
Works changes the font, size, and style of all text in the chart except the title.
\(\stackrel{\rightharpoonup}{ }\)
The font or size I want isn't listed?
The fonts and sizes you see listed are determined by the printer you are using. If your printer doesn't support the font or size you want to use, you may be able to add additional fonts. For information on adding fonts, see your printer's documentation.

\section*{Tip}

The font and size you choose affects the amount of text a chart can display in a label or subtitle. For longer labels and subtitles, choose a proportional font and a small point size.
\(\rightarrow\)

To change between color or black-and-white display
From the Options menu, choose Display As Printed. Works displays the chart in black and white, and a check mark is displayed beside the command on the menu.

To change back to color display, choose Display As Printed again.

\section*{To add or delete a border}
- From the Format menu, choose Show Border. Works adds a border around the chart, and a check mark is displayed beside the command on the menu.

To delete the border, choose Show Border again.

To create a header or footer
1 From the Edit menu, choose Headers \& Footers.
2 Type the text and any header and footer codes you want (see table below).
For example, to left align the header Customers, type...
...or type this to have Works automatically insert the page number as a footer.
3 Choose OK.
 Preview button on the Toolbar.
```

When you insert a date or time in a header or footer, it is displayed as 6/8/92 (short form), June 8, 1992
(long form), or 2:30 PM (12-hour clock). This may vary depending on the country you selected when you first
installed Windows.
For more information, see
Changing the International Settings.
\nabla

```

To delete a header or footer
1 From the Edit menu, choose Headers \& Footers.
2 In the Header or Footer box, highlight the text you want to delete.

3 Press the DEL key.
4 If necessary, repeat steps 2 and 3 to delete text in the other box.
Choose OK.

To change the starting page number
1 From the File menu, choose Page Setup \& Margins.
2 Type the number you want Works to use as the starting page number.

3 Choose OK
\(>\)
I don't see any page numbers on my printed document?
You need to create a header or footer that tells Works to insert the page number. For more information, see \(\rangle_{=}\) How to Create a Header or Footer.
\(>\)

To adjust header or footer margins
1 From the File menu, choose Page Setup \& Margins.
2 Type a new measurement for any of the margins you want to change.
Works assumes the unit of measure is inches--you don't have to type the inch symbol (").

The header margin must be smaller than the top margin and the footer margin must be smaller than the bottom margin.

3 Choose OK.

\section*{Tips}
- If you want to enter another unit of measure, such as centimeters, points, or picas, type the abbreviation after the measurement. For example, type \(\mathbf{c m}\) for centimeters, pi for picas, or pt for points. For information on changing the preset unit of measure, see How to Change the Unit of Measure.
If you want to check the header or footer position on the page before you print, click the Preview button on the Toolbar.

\section*{To change the page size}

1 From the File menu, choose Page Setup \& Margins.
2 Type a new measurement for the page length or width.
Works assumes the unit of measure is inches--you don't have to type the inch symbol (").

Note: If you want to print on legal paper, change the page length to 14 ".
3 Choose OK.
4 From the File menu, choose Printer Setup.
5 Choose Setup.
6 To print on paper other than \(8.5^{\prime \prime}\) by \(11^{\prime \prime}\), choose the paper size you want.

\section*{7 Choose OK.}

Note: When you change the page size in the Printer Setup dialog box, you change it for all documents and applications.

For example, if you change to legal-size paper ( \(8.5^{\prime \prime}\) by 14 "), but then want to print a document on letter-size paper ( \(8.5^{\prime \prime}\) by 11 "), you need to:

1 Make sure the page length and width settings are correct in the Page Setup \& Margins dialog box.
2 Change the paper size back to letter size ( \(8.5^{\prime \prime}\) by 11") in the Printer Setup dialog box.
If you forget to do this, Works will give you a message before you print.
\(>\)

\section*{To change the page orientation}

1 From the File menu, choose Page Setup \& Margins.
2 To change the page orientation, switch the height and width measurements.
For example, to print horizontally on \(8.5^{\prime \prime}\) by \(11^{\prime \prime}\) paper, change the length to \(8.5^{\prime \prime}\) and the width to \(11^{\prime \prime}\).
Works assumes the unit of measure is inches--you don't have to type the inch symbol (").

3 Choose OK.
4 From the File menu, choose Printer Setup.
5 Choose Setup.
6 Under Orientation, choose Portrait or Landscape.

7 Choose OK.

\section*{Notes:}
- When you change the orientation in the Printer Setup dialog box, you change it for all documents and applications.

For example, if you change the orientation to landscape but then want to print a document in portrait orientation, you need to:

1 Change the page length and width in the Page Setup \& Margins dialog box.
2 Change the orientation back to Portrait in the Printer Setup dialog box.
If you forget to do this, Works will give you a message before you print.
- When you change to landscape orientation, there are only certain fonts that are available for printing.

This may temporarily change the way all your documents look.
For example, if you print your spreadsheet and then want to print a word processor document using other fonts, you need to change back to portrait orientation to see those fonts again.

To adjust page margins
1 From the File menu, choose Page Setup \& Margins.
2 Type a new measurement for any margin you want to change.
Works assumes the unit of measure is inches--you don't have to type the inch symbol (").

The header margin must be smaller than the top margin and the footer margin must be smaller than the bottom margin.

3 Choose OK.
Note: Margins for headers and footers are different from page margins. See Defining Headers and Footers.

\section*{Tige:}

If you want to enter another unit of measure, such as centimeters, points, or picas, type the abbreviation after the measurement. Type cm for centimeters, pi for picas, or pt for points.

For information on changing the preset unit of measure, see How to Change the Unit of Measure.
If you want to see what the margins look like before you print, click the Preview button on the Toolbar.
\(\downarrow\)

To change the printed chart size
1 Open or switch to the chart whose printed size you want to change.
2 From the File menu, choose Page Setup \& Margins.

3 Choose the size you want.
4 Choose OK.
\(>\)

To preview a chart
1 On the Toolbar, click the Print Preview button
--or--
From the File menu, choose Print Preview.

Works displays the chart in the print preview window.
2 To
- Magnify the page half way, choose Zoom In.

To move from one part of the magnified page to another, use the scroll bars
--or--
Press PAGE UP or PAGE DOWN.
- Magnify the page all the way, choose Zoom In twice.
- Return to the full page, choose Zoom Out once or twice depending on how many times you magnified the page.
Print the document, choose Print.
Leave print preview, choose Cancel.
Tip
When you move the mouse pointer over the page it changes to a magnifying glass. You can then click the page to zoom in or out.

To print a chart
1 On the Toolbar, choose the Print button.
--or--
From the File menu, choose Print.
--or--
Press CTRL+P.
2 If you want more than one copy, type the number of copies you want.

3 Choose OK.
\(\downarrow\)
I want to print the chart sideways on the paper?
You need to change the page orientation from portrait to landscape. See Changing the Page Size and Orientation.

To copy a chart to another application
1 From the Charts menu, choose the name of the chart you want to copy.
2 From the Edit menu, choose Copy.
--or--
Press CTRL+C.
3 Open the application and file you want to copy to.
4 Move the insertion point or highlight to the location where you want to insert the chart.
5 From the Edit menu, choose Paste or the equivalent command.
Note: Depending on the Windows application you copy to, the chart's colors or patterns may change. Check the application's documentation for more information.
\(\geqslant\)

To link a chart to another application
Note: The capabilities and procedures for linking vary with each particular Windows application. For more information, see the manual for the particular application you want to link to.
1 From the Charts menu, choose the name of the chart you want to copy and link.
2 From the Edit menu, choose Copy.
--or--
Press CTRL+C.
3 Open the application and file you want to copy to.
4 Move the insertion point or highlight to the location where you want to insert the chart.
5 From the Edit menu, choose the command the application uses to paste the chart and establish the link. Some applications use an Insert command, while others use a Paste Link or Paste Special command. For more information, see the application's manual.

\section*{\(>\)}

\section*{Gridlines}

Lines used to divide your spreadsheet into a grid of rows and columns.
To hide or display the gridlines, choose the Show Gridlines command from the Options menu.
- To print with gridlines, choose Page Setup \& Margins from the File menu, then click the Print Gridlines check box

\section*{Absolute value}

The nonnegative number equal in numerical value to a given real number.
For example, the absolute value of -16 is 16 .

\section*{Filename}

Filenames can contain up to eight characters. You can use any characters except for spaces and those shown below, which have a special meaning for DOS.

When you save a document, Works automatically adds a three letter extension to the filename to help you identify the type of document. Works adds the extension .WPS to a Word Processor document, .WKS to a spreadsheet, or .WDB to a database..

\section*{To add a right vertical ( Y ) axis}

1 From the Format menu, choose Two Vertical (Y) Axes.
2 In the Value Series boxes, choose one or more value ( Y ) series you want to assign to the right vertical ( Y ) axis.

3 Choose OK.

\section*{To choose a tool}
- Click the one you want or.
--or--
- Press ALT+the underlined letter of the tool you want.

\section*{To move the insertion point () or highlight ()}
- Click where you want to place the insertion point or highlight. --or--
- Press the arrow keys ().

\section*{Proportional font}

A font in which different letters take up different amounts of space. For example, in a proportional font a "w" takes up more space in a line than than an "i". In a non-proportional font, both these characters occupy the same amount of space.

\section*{To choose a check box}
- Click each empty check box you want to choose.

Note: To clear a check box, click it again.

\section*{To clear a check box}
- Click each check box you want to clear. A cleared check box is empty.

Note: To choose a checkbox, click it again.

\section*{To check that protection is turned off}

1 Click the Options menu
2 If protection is turned off, there will be no check mark next to Protect Data.
3 If you see a check mark next to Protect Data, click Protect Data to turn protection off.

\section*{To check that all cells are locked}

1 Highlight the entire spreadsheet by clicking the button above the first row number.

2 From the Format menu choose Style.

If all fields are locked, an X appears in the check box. If only some of the fields are locked, the check box appears grayed.
3 If only some of the fields are locked, click the check box to lock all fields.

\section*{To choose a different directory or drive}
- To choose a different directory, click the Drive icon then double-click the directory or subdirectory you want.

To choose a different drive, click the down arrow to see the list of drives then click the drive you want.

For example, to save a file on a floppy disk, choose drive a:

\section*{Column labels}

Letters that identify the spreadsheet's columns. There are 256 columns.

\section*{Row labels}

Numbers that identify the spreadsheet's rows. There are 4096 rows.

\section*{Scroll bars}

Use to view different parts of your spreadsheet.

\section*{Horizontal split bar}

Drag to divide the spreadsheet window into two panes horizontally.

\section*{Vertical split bar}

Drag to divide the spreadsheet window into two panes vertically

\section*{Formula}

A sequence of values, cell references, names, functions, or operators that is contained in a cell and produces a new value from existing values.

When you type a formula, start with an equal sign (=).

\section*{Cell}

The intersection between a column and row. For example, column D and row 2 meet at cell D2.

\section*{Active cell}

The cell bordered by the highlight.
The contents of the active cell appear in the formula bar.

\section*{Range}

A rectangular section of a spreadsheet containing two or more cells.

\section*{Format}

Refers to the way an entry looks within a cell. The format includes the alignment (general, left, right, center), styles (bold, italic, underline), and the way dates, times, and numbers are displayed.

\section*{To highlight a cell or range of cells}
- Click the cell you want to highlight.

To highlight a range, move the pointer () to the upper-left cell in the range; then hold down the mouse button and drag until you highlight the entries you want.

\section*{To highlight rows or columns}
- Click the row or column label.

To highlight several adjacent rows or columns, move the pointer () to a row or column label; then hold down the mouse button and drag down or to the right, respectively, until you highlight the rows or columns you want.

\section*{To highlight the entire spreadsheet}
- Click the highlight box at the top-left corner of the spreadsheet.
-or-- From the Select menu, choose All.
Press CTRL+SHIFT+F8.

\section*{To highlight text}
- Drag the mouse pointer through the text.

\section*{Cell or range reference}

The location of a cell or range designated by column and row labels. For example, the cell reference of the active cell below is C2.

\section*{Cell reference}

The location of a cell designated by column and row labels. For example, the cell reference of the active cell below is C 2 .

\section*{Range reference}

The location of a range designated by column and row labels. For example, the range reference of the highlighted range below is \(\mathrm{B} 2: \mathrm{C} 4\).

\section*{Range name}

A name you create and use to refer to a cell or range instead of its reference. Names make formulas easier to understand. You can use names and references interchangeably.

\section*{Status bar}

An area at the bottom of the Works window that displays messages and command descriptions.

If the status bar is not displayed, choose Works Settings from the Options menu and then choose Show Status Bar.

\section*{Number}

A number can be entered directly in a cell or produced as the result of a formula. You can apply various formats to numbers.

Note: When you enter a date or time in a format Works recognizes, Works stores the date or time as a number.

\section*{Text}

Any set of characters entered in a cell that Works does not interpret as a formula, number, date, time, logical value, or error value. You can copy, cut, format, and print text, as well as use text in formulas, but Works does not perform calculations on text.

\section*{Date}

You can enter dates into cells and use them in formulas. When you type a date, use any of the formats Works recognizes.

When you type a date using a format Works recognizes, Works stores the date as a number. You can then use the date in a formula to determine elapsed time.

\section*{Time}

You can enter times into cells and use them in formulas. When you type a time, use any of the formats Works recognizes.

Note: When you type a time using a format Works recognizes, Works stores the date as a number. You can then use the date in a formula to determine elapsed time.

\section*{Value}

Information that you type directly into a cell, or that is calculated by the formula in a cell. Values include text, numbers, dates, and times. A formula is not a value.

\section*{Formula bar}

\section*{Logical value}

Either TRUE or FALSE. Usually, logical values result from formulas that perform comparisons, such as determining if the number in one cell is larger than the number in another cell.

\section*{Error value}

Values such as ERR or \#\#\#\#\# that Works displays when it cannot properly calculate a formula or display its result. For example, Works displays \#\#\#\#\# if you enter a number that is incompatible with the cell's number format.

\section*{Cancel box}

The button on the formula bar you click to cancel your typing, leaving the entry in the active cell unchanged.

\section*{Enter box}

The button on the formula bar you click to enter your typing into the active cell.

\section*{Works tool}

Works has five tools: the Word Processor, Database with Reporting, Spreadsheet, Charting, and Draw. They can be used separately or together, and some types of information can be used in more than one tool. For example, you can insert a chart into a Word Processor document or copy information from the Spreadsheet to the Database.

\section*{Function}

A built-in calculation you can use in a formula. For example, in the formula =AVG(Sales), Works computes the average value of the numbers in the Sales range using the AVG function. You do not need to manually add or count the values in the range to find the average; Works does this for you.

\section*{Template}

A "sample document" you can create to save time when you want to create several similar documents. When you create a template, each new document you create will have the settings, text, and formats you included in the template, until you turn the template off.

\section*{Number format}

Determines the way a cell displays numbers. You can format a cell to diplay numbers as percentages (49\%), in exponential notation \((6.023 \mathrm{E}+10)\), with currency symbols and commas ( \(\$ 1.023 .00\) ), and so on.

\section*{Calculate}

The spreadsheet automatically calculates (performs all operations and formulas) every time you enter a value or formula or whenever you save the spreadsheet. You can also calculate a spreadsheet manually.

\section*{Operator}

You can use operators in a formula to specify an operation, such as addition or multiplication. Works recognizes the following operators:
+ (addition), (subtraction), * (multiplication), / (division), - (negative), + (positive), ^(exponential), \(=(\) equal to \()\).

\section*{Constant value}

A value you type in a cell, such as a number, date, or time. Unlike values resulting from formulas, constant values are not subject to change when the spreadsheet recalculates.

\section*{Style}

Determines the appearance of text and numbers. You can apply styles such as bold, underline, and italic to draw attention to particular information.

\section*{Alignment}

Determines the position-(left, center, or right) of an entry in a cell.

Works presets the alignment of text to the left and the alignment of numbers, dates, and times to the right. You can change alignment as you like for individual cells and ranges of cells.

\section*{Text file (ASCII)}

A file containing only text and values (including number formats), but not containing cell or text formatting or formulas. When you save a spreadsheet as a text file, the cell entries are separated by commas, and the rows of entries are separated by paragraph marks.

\section*{Cell border}

A solid line you can add to a cell to emphasize key information and make your spreadsheet easier to read. You can add any combination of lines to the left, right, top, or bottom of a cell.

\section*{Tab mark ( \(\rightarrow\) )}

A character inserted when you press TAB. If you copy or move spreadsheet information to a word processor, each cell entry is separated from the next by a tab mark.

\section*{Paragraph mark ( \({ }^{1}\) )}

The character inserted when you press ENTER. If you copy or move spreadsheet information to a word processor, each cell entry is separated from the next by a tab stop and each row ends with a paragraph mark.

\section*{Page break}

Tells the printer where to end one page and where to begin printing a new one. Works automatically inserts a page break when you've entered enough information to fill a page. As you enter or delete information, Works adjusts
the automatic page breaks.
You can also insert manual page breaks. When you insert a manual page break, Works repositions the automatic page breaks that follow it.

\section*{Field}

A category of information in a database, such as Last name or First name.

The term "field" refers to both the field name and the entry.

\section*{Record}

In a database, all the information about one person, product, event, and so on.

For example, in an address list, a record includes all the information about one person, such as their last name, first name, street, city, state and Zip Code.

\section*{Header}

Text that prints at the top of every printed page. You can use headers to add page numbers, titles, or dates to your printed document.

\section*{Footer}

Text that prints at the bottom of every printed page. You can use footers to add page numbers, titles, or dates to your printed document.

\section*{Orientation}

The placement of your spreadsheet on the printed page. Normally, you print vertically, in portrait orientation. You can also print sideways on the page in landscape orientation.

Margin
The space between the edges of a printed page and the printed area.

\section*{Time/date format}

Specifies how to display times and dates. An example of a long date format is month, day, year (Sep 25, 1947); a short date format is month, year (9/47). An example of a 12 -hour time format is \(2: 30 \mathrm{PM}\); a 24 -hour time format is 14:30.

\section*{Dialog box}

A window that displays options for you to review or change. When you choose a menu command that is followed by an ellipsis (...), Works displays a dialog box to get specific information before carrying out the command. A dialog box is your way of "conversing" with Works.

\section*{Arrow keys}

The UP ARROW, DOWN ARROW, LEFT ARROW, and RIGHT ARROW keys ().

\section*{Toolbar}

Use the Toolbar to quickly:
- Change the font, style, and alignment of entries in your spreadsheet.
- Switch between views.
- Preview and print your document If the Toolbar is not displayed, choose Show Toolbar from the Options menu.

\section*{Font}

A set of characters with a specific design; also called a typeface or typestyle. Each font has a name, for example, Courier or Helv. Each font has one or more sizes (measured in points) to choose from.

\section*{Non-proportional font}

A font in which all characters take up the same amount of space. For example, in a non-proportional font a "w" occupies the same amount of space in a line as an " \(i\) ". In a proportional font, these characters occupy different amounts of space.

\section*{Move the insertion point or highlight}
- Click where you want to place the insertion point or highlight. --or--
- Press the arrow keys .

\section*{Change the column width}

1 Move the mouse pointer () to the border at the right of the column label.
When you have it in the right place, the pointer changes shape.

2 Hold down the mouse button and drag to the left or right until the column is the width you want.

\section*{Drag}

1 Press and hold down the mouse button and then move the mouse.
2 Stop and release the mouse button.

\section*{Pane}

You can split a document window into two panes horizontally and two panes vertically. You can view a different part of the current document in each pane, which makes it easy to compare different sections of a long document.

Block
Adjacent cells with entries comprise a block. Blocks are separated from each other by empty cells.

\section*{Click}

1 Move the mouse pointer over the item you want.
2 Press and quickly release the mouse button.

General

Fixed

Comma

\section*{Percent}

Exponential

Leading zeros

\section*{True/False}

\section*{To choose an option}
- Click the one you want. You can only choose one option at a time.

\section*{To choose from a drop down list box}

If you can't see all of the items, click the up or down arrow or drag the scroll box
-
To choose the item and complete the command, double-click the item.

\section*{To choose from a combo box}

If you can't see all of the items, click the up or down arrow or drag the scroll box.
To choose the item and complete the command, double-click the item.

\section*{To choose from a list}

If you can't see all of the items, click the up or down arrow or drag the scroll box.
To choose the item and complete the command, double-click the item.

Clipboard
A temporary storage area for cut or copied information. You can paste the contents of the Clipboard into another part of your spreadsheet, another Works document, or another Windows application.

\section*{To insert a row or column}

1 Highlight a row or column for each row or column you want to insert.

\section*{To highlight Click the}

A row row label
Several rows uppermost row label and then drag down
A column column label
Several columns leftmost column label and then drag to the right

2 From the Edit menu, choose Insert Row/Column.

\section*{To open or switch to a file}

To open a file
1 From the File menu, choose Open Existing File.
2 Under File Name, double-click the name of the file you want to open.
If you can't see all of the file names, click the up or down arrow.
If the file is located in a different directory, double-click the directory and then choose the file.

\section*{To switch to a file}
- Click the file or choose its name from the Window menu.

\section*{Header margin}

The space between the top edge of the paper and the first line of header text. The header margin must be smaller than the document's top margin.

\section*{Footer margin}

The space between the bottom edge of the paper and the first line of footer text. The footer margin must be smaller than the document's bottom margin.

\section*{Ascending order}

Entries are organized alphabetically from A-Z or numerically from 0-9. Works sorts text entries first, followed by numbers, and then blanks.

If cells contains mixed entries (such as addresses that contain numbers and text), Works places mixed entries that begin with numbers ahead of mixed entries that begin with text.

\section*{Descending order}

Entries are organized alphabetically from Z-A or numerically from 9-0. Works sorts numbers first, followed by text, and then blanks.

If cells contains mixed entries (such as addresses that contain numbers and text), Works places mixed entries that begin with text ahead of mixed entries that begin with numbers.

\section*{Inventory Summary}

If you enter text that is wider than the column's width, the excess text is displayed in the cells to the right, if those cells are empty.

\section*{Vendo}

If you enter text that is wider than the column's width, and the cell to the right is not empty, Works displays only the text that fits.

\section*{\(9 \mathrm{E}+07\)}

If you enter a number that is wider than the column's width, and that width (in characters) is 6 characters or more, Works displays the number in exponential number format.

\section*{\#\#\#\# (No.)}

If you enter a number that is wider than the column's width, and that width (in characters) is 5 characters or less, Works displays \#\#\#\#.

\section*{\#\#\#\# (Date)}

If you enter a number that does not match the time/date format of the cell or you enter a date that is wider than the column's width, Works displays \#\#\#\#.

\section*{Scale}

A set of numbered marks measuring values along an axis. A scale has a minimum value, a maximum value, and an interval between the marks.

\section*{Series}

A row or column of spreadsheet entries used in a chart. A value series is a range of spreadsheet entries represented by bars, lines, pie slices, or points in a chart. Value ( Y ) series is also called Y -series, number series, or data series. A category \((X)\) series is a range of spreadsheet entries used to label the categories along the horizontal (X)-axis of a chart. Category series is also called horizontal (X) series or X-series.

\section*{Variation}

Each chart type has several variations to choose from. For example, there are five variations of bar chart.

\section*{Category}

The units of measure or identifiers along the horizontal ( X ) axis. The tick marks along this axis indicate individual categories. To identify categories, you can specify a range of spreadsheet entries (numbers or text) as category labels.

\section*{Legend}

The symbols below a chart that show the colors, patterns, and markers used to represent each value (Y) series. You can specify a range of spreadsheet cells to appear as the legend's text.

Title bar
The bar at the top of a window that displays the name of the application or document. If more than one window is open, the title bar for the active window (the one in which you are working) is a different color than the other title bars. You can move a window by dragging its title bar.

\section*{Chart type}

Works offers six basic types of charts: bar, line, pie, stacked line, XY (scatter), and combination. Each chart type has several variations to choose from. You can change a chart from one type to another or combine types.

\section*{Marker}

The rectangles, circles, diamonds, and other symbols that mark data points in a line, stacked line, or combination chart. You can change the marker type, or use no markers at all.

\section*{Link}

A connection between information in two different applications or Works tools. When information from one application is copied and linked to another, changes to the original information are automatically made to the copy in the other application.
For example, if you link entries in a Works spreadsheet to a Word Processor document, any changes you make to the entries in the spreadsheet are automatically updated in the Word Processor document.

\section*{Title}

The text at the top of a chart. You specify the title text and can change it at any time.

\section*{Subtitle}

The secondary text below the chart's title. You specify the title text and can change it at any time.

\section*{Axis title}

The descriptive text that runs vertically along the right or left vertical ( Y ) axis or below the horizontal ( X ) axis and its category labels. You specify an axis title and can change it at any time.

\section*{Preview}

You can see how your chart will look before printing by previewing it. Margins all appear in their correct locations. Text is scaled to show different font sizes and the chart is scaled to show its printed size.

\section*{Plotter}

A color printer that uses pens to draw diagrams, charts, and other graphics by plotting locations on a grid.

\section*{Data label}

Words or numbers from a spreadsheet that call attention to specific values in a chart. You can display data labels next to or above the specific bars, lines, pie slices, or markers they identify.

\section*{Vertical (Y) axis}

The vertical line along the left edge of a chart, where the scale numbers appear. You can also add a second vertical ( Y ) axis along the right edge of the chart for a different type of scale. The vertical ( Y ) axis is also called the Y-axis.

\section*{Horizontal (X) axis}

The horizontal line across the bottom of a chart. This is where category labels appear, if a category series has been defined. The horizontal \((\mathrm{X})\) axis is also called the X -axis.

\section*{Hi-lo-close}

A chart that shows the range between the highest and lowest values in each category, including intermediate values. The chart was designed to illustrate stock market trends: the high, low, and closing prices for a stock. Each category is shown as a vertical line with markers indicating individual values. Like other chart types, a hi-loclose chart can have up to six value \((Y)\) series. But, unlike other chart types, you must include at least two value \((\mathrm{Y})\) series.

\section*{Category label}

Text or numbers that identify each category of a chart. Category labels appear along the X -axis of charts that have an X-axis, and next to the wedges of a pie chart. The text is taken from a range of cells in the spreadsheet called the category ( \(X\) ) series.

\section*{Value ( Y ) series}

A range of spreadsheet entries represented by bars, lines, pie slices, or points in a chart. Each value \((\mathrm{Y})\) series represents a row or column of entries in a spreadsheet The value \((Y)\) series is also called the \(Y\)-series, number series, or data series.

\section*{Category ( \(X\) ) series}

A row or column of spreadsheet entries used in a chart. A category ( X ) series is a range of spreadsheet entries used to label the categories along the horizontal (X)-axis of a chart. Category series is also called horizontal (X) series or X-series.

\section*{To open an application and file}

1 From the Windows menu in Program Manager, choose Main.
2 Double-click the File Manager.

3 Double-click the directory window that contains the file you want to open. For example, Excel.

4 Double-click the name of the file you want to open, for example, expenses.xls.

\section*{To move the highlight ()}
- Click where you want to place it. --or--

Press the arrow keys ().

\section*{Double-click}

1 Move the mouse pointer over the item you want.
2 Press and release the mouse button twice in quick succession.

File
In Works, a word processor document, database, or spreadsheet that is saved on a disk. Each file has a unique name and an extension, for example, BUDGET.WKS.

\section*{Header and Footer Codes}

When you create a header or footer, you can use codes to change the alignment of text or to insert page numbers, the filename, or the current date or time.
\begin{tabular}{lr} 
To & Type \\
Print the page number & \(\boldsymbol{\&} \mathbf{p}\) \\
Print the date in short format & \(\boldsymbol{\&} \mathbf{d}\) \\
Print the date in long format & \(\boldsymbol{\&} \mathbf{n}\) \\
Print the time & \(\boldsymbol{\&}\) \\
Print the filename & \(\boldsymbol{\&} \mathbf{f}\) \\
Left-align text & \(\boldsymbol{\& 1}\) \\
Center text & \(\boldsymbol{\&} \mathbf{c}\) \\
Right-align text & \(\boldsymbol{\& r}\) \\
Print \& (ampersand) & \(\boldsymbol{\& \&}\)
\end{tabular}

You can use codes together with text, and include as many codes as you want in a single header or footer. For example, to create a header or footer like this...
Budget Page \(1 \quad\) 04/02/91
...type \&lBudget\&cPage \&p\&r\&d

\section*{Argument}

Values that you supply for a function to use in its calculations. Most Works functions use one or more arguments.

\section*{To open or switch to a chart}

To open a chart
1 From the File menu, choose Open Existing File.
2 Under File Name, double-click the name of the spreadsheet whose chart you want to open.
If you can't see all of the file names, click the up or down arrow.
If the file is located in a different directory, double-click the directory then choose the file.
3 From the Charts menu, choose the chart you want.
To switch to a chart
- Click the chart or choose its name from the Window menu.

\section*{To size a window}

1 Move the mouse pointer over the window's border, until the pointer changes shape.
2 Drag the border until the window is the size you want.
Point to one of the window's corners to drag the border in two directions at once.
3 When the window is the size you want, press ENTER.

\section*{Wildcard}

A symbol that can stand for any character or any number of characters.

\section*{Options Show Toolbar}

Choose to hide or show the Toolbar.
When the Toolbar is hidden, the check mark is no longer displayed beside Show Toolbar on the Options menu.
When the Toolbar is displayed, the check mark is displayed beside Show Toolbar on the Options menu.
More information
Hiding the Toolbar or status bar

\section*{Edit Copy}

Copies the current chart to the Clipboard.
- You can then paste the chart in a Works Word Processor document or in another Windows application. - You can paste the same chart as many times as you like until you cut or copy other information to the Clipboard.

\section*{Shortcut...}

To copy a chart, press CTRL+C.

\section*{More information}

Copying and duplicating

\section*{Format Show Border}

Choose to add a rectangular border around a chart.
- When the border is displayed, a check mark is displayed next to Show Border on the Format menu. When the border is not displayed, the checkmark is no longer displayed beside Show Border on the Format menu.

\section*{More information}

Adding and deleting a border

\section*{Format Show Legend}

Choose to hide or show a chart's legend.
When the legend is hidden, the check mark is no longer displayed beside Show Legend on the Format menu.
When the legend is displayed, the check mark is displayed beside Show Legend on the Format menu.
More information
- Changing the legend

\section*{Options Display As Printed}

Displays a chart as it will appear when printed.
When the option is turned on, Works displays the chart on your screen in black-and-white patterns instead of colors, and a check mark is displayed beside Display As Printed on the Options menu.
When the option is turned off, the chart is displayed in color if you have a color monitor, and a check mark is no longer displayed beside Display As Printed on the Options menu.

\footnotetext{
More information
Color or black-and-white display
}

\section*{File Print Preview}

Displays your chart as it will appear when printed
Print preview displays an entire page in reduced scale, including headers and footers, titles, and page numbers. To:
```

Magnify the page half way, click Zoom In.
\ Move from one part of the magnified page to another, use the scroll bars
--or--
Press PAGE UP or PAGE DOWN.
Magnify the page all the way, click Zoom In twice.
Return to the full page, click Zoom Out once or twice depending on how many times you magnified the
page.
Print the chart, click Print.
Leave print preview, click Cancel.
Shortcut...

```

To choose Print Preview, click the Preview button on the Toolbar.

\section*{More information}
\(\stackrel{\rightharpoonup}{ }\)

\section*{File Save As}

Use to:
Name a spreadsheet.
- Save an exisiting spreadsheet under a new name.
- Save a spreadsheet so you can use it with another application.
- Create a template.

Shortcut...
To rename a chart, choose Name from the Charts menu. For more information, see Naming and Saving Charts.
More information
Creating templates
Naming and saving a spreadsheet
Naming and saving charts

\section*{Edit Series}

Use to create, change, or delete a category ( X ) series and up to six value ( Y ) series.

\section*{More information}
- Changing a chart

Creating a custom chart

\section*{Edit Titles}

Use to create, change, or delete a chart title, a subtitle, and axis titles. Titles can refine and clarify a chart by identifying units of measure for scales or by helping to interpret chart information.

What if my titles appear incomplete on the chart?

\section*{More information}

Adding and deleting titles
Changing fonts and styles

\section*{What if my titles appear incomplete on the chart?}

Works displays as much of a title as will fit, depending on the length of the title, the size of the chart window, and the title's font and font size. You can change any of these to make your titles fit.

\section*{Edit Legend}

Use to create, change, or delete legend text for each value (Y) series. A legend tells you what a chart's colors, patterns, and markers mean. Legends are displayed below the horizontal ( X ) axis on all chart types except pie charts, which do not have legends.

What if the legend appears incomplete on the chart?

\section*{More information}

Changing the legend
Phanging a series

\section*{What if the legend appears incomplete on the chart?}

Works displays as much of the text as will fit, depending on the text length, the size of the chart window, and the text's font and font size. You can change any of these to make your legends fit.

\section*{Edit Data Labels}

Use to create labels that are displayed next to or above the bars, lines, or markers they identify. These labels contain words or numbers from a highlighted spreadsheet range.

What if my data labels appear incomplete on the chart?

\section*{More information}

Adding and deleting data labels
Changing colors, patterns, and markers

\section*{What if my data labels appear incomplete on the chart?}

Works displays as much of the label as will fit, depending on the label's length, the size of the chart window, and the label's font and font size. You can change any of these to make your data labels fit.

\section*{Edit Data Labels}

Use to label the slices of a selected Pie chart. Data labels are displayed next to the pie slices they describe, with the \(2 n d\) Label enclosed in parentheses.

What if my data labels appear incomplete on the chart?

\section*{More information}

Adding and deleting data labels
Changing colors, patterns, and markers

\section*{Edit Go To}

Jumps to and highlights spreadsheet cells that correspond to the category \((X)\) series, value \((Y)\) series, or data labels you specify.

\section*{Shortcut...}

\section*{More information}
- Changing a chart

\section*{Gallery Bar}

Creates the type of bar chart you specify. Bar charts show differences between various categories of information. Each row or column of spreadsheet numbers appears as a set of bars with the same pattern or color.

\section*{Shortcut...}

\section*{More information}

Changing the chart type
Chart types
Creating a custom chart

\section*{Gallery Line}

Creates the type of line chart you specify. Line charts show trends or changes in information. Each line represents a row or column from your spreadsheet.

Shortcut...
More information
Changing the chart type
Chart types
Creating a custom chart

\section*{Gallery Pie}

Creates the type of pie chart you specify. Pie charts show percentage breakdowns. Each pie slice represents an individual value; the whole pie represents one spreadsheet column or row.

\section*{Shortcut...}

\section*{More information}

Changing the chart type
Chart types
Creating a custom chart

\section*{Gallery Stacked Line}

Creates the type of stacked line chart you specify. A stacked line chart is one in which the lines are combined to show the total in each category. Each line's values are added to those of the line below. This type is also called an area line chart.

Shortcut...

\section*{More information}

Changing the chart type
Chart types
Creating a custom chart

\section*{Gallery XY (Scatter)}

Creates the type of XY chart you specify. An XY chart shows numerical values from the spreadsheet along both the horizontal \((X)\) axis and the vertical \((Y)\) axis. Each marker represents the relationship between the \(X\) and \(Y\) values.

Shortcut...

\section*{More information}
Changing the chart type
Chart types
Creating a custom chart

\section*{Gallery Combination}

Creates the type of combination chart you specify. Combination charts display some information as lines and some as bars. Each line or bar represents a row or column from your spreadsheet.

\section*{Shortcut...}

\section*{More information}

Changing the chart type
Chart types
Creating a custom chart

\section*{Format Horizontal Axis}

Use to add or remove vertical gridlines and change the frequency of category labels. These refinements can help make some charts easier to read.

What if my category labels appear incomplete on the chart?

\section*{More information}

Adding and deleting gridlines
Changing category labels

\section*{What if my category labels appear incomplete on the chart?}

Works displays as much of the category label as will fit, depending on the length of the label, the size of the chart window, and the label's font and font size. You can change any of these to make your labels fit.

\section*{Format Vertical Axis}

Use to define the scale of the left vertical (Y) axis, to add or remove horizontal gridlines, and to specify the type of bar or line chart assigned to the left vertical (Y) axis.

\section*{More information}
Creating a custom chart
Adding and deleting gridlines
Changing scales

\section*{Format Right Vertical Axis}

Use to define the scale of the right vertical (Y) axis, to add or remove horizontal gridlines, and to specify the type of bar or line chart assigned to the right vertical \((\mathrm{Y})\) axis.

How do I know which axis refers to which value \((\mathrm{Y})\) series on the chart?

\section*{More information}

Changing scales
Adding or deleting a right vertical (Y) axis
Adding titles and labels

How do I know which axis refers to which value (Y) series on the chart?
Space permitting, you will want to add right and left vertical \((\mathrm{Y})\) axis titles to associate each axis with its respective series.

\section*{Format Two Vertical Axes}

Use to create a right vertical \((Y)\) axis for the value \((Y)\) series you assign to it. Be consistent as you assign the value ( Y ) series to each vertical ( Y ) axis. For example, assign all sales figures to the left axis and all interest rates to the right.

How do I know which axis refers to which value \((\mathrm{Y})\) series on the chart?

\section*{More information \\ Changing scales \\ Adding or deleting a right vertical ( Y ) axis \\ Creating a custom chart}

\section*{Format Mixed Line \& Bar}

Use to create a chart that displays each value \((\mathbf{Y})\) series as either a line or a set of bars. For example, use this command to show individual values as bars and averages as a line in one chart.

What if the unit of measure of the value \((Y)\) series I assign to a set of bars is different from that of the series I assign to Line?

\section*{More information}

Mixing lines and bars

What if the unit of measure of the value \((Y)\) series \(I\) assign to a set of bars is different from that of the series I assign to Line?
Add a right vertical \((\mathrm{Y})\) axis to the chart. Assign the bars' value \((\mathrm{Y})\) series to one vertical \((\mathrm{Y})\) axis and the line's series to the other.

\section*{Format Patterns and Colors}

Use to change the colors, patterns, and markers that Works initially assigned when you created the chart. Note: Markers are not available for bar and pie charts.

\section*{What if the changes I make don't show up on the chart?}

\section*{More information}

Changing colors, patterns, and markers

\section*{What if the changes I make don't show up on the chart?}

Make sure you click the Format or Format All button after assigning a color and pattern (or marker) to each value (Y) series.

\section*{Format Patterns \& Colors}

Use to change the colors and patterns that Works initially assigned to individual pie slices when you created the chart.

Note: Markers are not available for pie charts.

What if the changes I make don't show up on the chart?

\section*{More information} Changing colors, patterns, and markers

\section*{What if the changes I make don't show up on the chart?}

Make sure you click the Format or Format All button after assigning a color and pattern to each pie slice.

\section*{Format Title Font}

Use to specify a font, font size, and style for a chart title. You can choose a font and size before or after typing a title.

What if I don't see the font I want?

\section*{More information}

Adding and deleting titles
Changing fonts and styles
Choosing a printer

\section*{What if I don't see the font I want?}

The fonts and sizes you see listed are determined by the printer you are using.
- If your printer doesn't support the font or size you want to use, you may be able to add additional fonts. For information on adding fonts, see your printer's documentation.
- If you have access to more than one printer, you can choose another printer to see different fonts and sizes. For more information, see Choosing a Printer.

\section*{Format Other Font}

Use to specify a font, font size, and style for all text and numbers in your chart except the title. This includes the chart subtitle, axis titles, legend, category labels, and data labels.

What if I don't see the font I want?

\section*{More information}

Adding and deleting titles
Changing fonts and styles
Choosing a printer

File Print
Use to print the current chart and to specify how many copies of the chart to print.

Shortcuts...
What if the printer won't print my chart?
More information
Printing
Choosing a printer

\section*{What if the printer won't print my chart?}

Make sure you have chosen the correct printer, and that the printer is plugged in, connected to your computer, and loaded with paper. If you have not selected a printer, choose the Printer Setup command from the File menu and choose the printer you want.

\section*{Edit Paste Series}

Use to paste a highlighted spreadsheet range into your chart as a category \((X)\) series or value \((Y)\) series.

Shortcut...
More information
Changing a series
Copying entries

\section*{Edit Headers \& Footers}

Use to create a one-line header or footer that prints at the top or bottom of every page. You can insert and position page numbers, the date, or the time by typing codes with text.
\(+\)
To display more information in a header or footer, you can try using a different font, changing to a smaller font size, or setting smaller margins.

\section*{More information}

Headers and footers

File Page Setup \& Margins
Use to define the margins and page size of the chart to be printed. You can also specify the size and proportion of the printed chart.

What if I want to print a chart horizontally?

\section*{More information}

Changing the page layout
Headers and footers

\section*{What if I want to print a chart horizontally?}

There are two basic steps to remember:
1 Switch the Page Length and Page Width measurements in this dialog box. For example, change the page length to \(8.5^{\prime \prime}\) and the page width to 11 ".
2 From the File menu, choose Printer Setup. Under Orientation, choose Landscape.
If these two settings don't match when you print, Works displays a message reminding you to change the settings.

\section*{Help}

When you click this button or press F1, Works displays this topic.
- If you need more help, click a topic name in the list under Hove infongation.

OK
- To carry out the choices you've made, click OK or press ENTER.

\section*{Cancel}
- To close the dialog box without accepting changes, choose Cancel or press ESC.

\section*{Control-menu box}

To close the dialog box without saving changes, double-click the Control-menu box or press ESC.

Title bar
Displays the name of the command.
- To move the dialog box to a new location, move the mouse pointer over the title bar, hold down the mouse button, and drag until you move the dialog box where you want it.

File Name
Lists all files in the current directory.
To name a file, type a name no more than eight characters long. You can use any characters except for spaces and those shown below, which have a special meaning for MS-DOS.

\section*{Directories}

Displays the current drive and directory (c:\msworks), followed by a list of subdirectories in the current directory. If you want to name a file and save it in another directory, change to that directory.

To change to another directory, double-click the drive to see the other directories, then click the directory you want.

If you can't see all of the directory names, click the up or down arrow.

\section*{Drives}

Displays the current drive.
- To save the file on another drive, click the down arrow to see the list of drives, and then click the one you want. For example, if you want to save the file on a floppy disk, click drive a:

Note: When you choose another drive, the directories on that drive will be listed under Directories. To change to another directory, click the one you want from the Directories list.

\section*{Make Backup Copy}

Click to create a backup copy of the spreadsheet. An "X" appears in the box when the option is chosen. To differentiate the copy from the original, Works adds the extension.BKS to the spreadsheet copy. The copy is updated each time you choose File Save or File Save As.

OK
- To carry out the choices you have made, click OK or press ENTER.

\section*{Save File as Type}

Saves the file as a Works spreadsheet (Works SS), unless you choose another file type. For example, you may want to save the file in another format so you can open it in another application or use it as a template.

To save the file in another format, click the down arrow to see the list of choices, and then click the one you want. If you choose:
- Text \& Commas, entries are separated by commas, and text, dates, times, and numbers in currency or percent format are enclosed in quotation marks.
Text \& Tabs (DOS), entries are separated by tabs, and number formats are saved. Try this before choosing Text \& Tabs.
- Text \& Tabs, the text file is saved in ANSI format. Entries are separated by tabs, and number formats are saved. Only some Windows applications recognize this format.
L Lotus Only, the file is saved so you can open it in any version of Lotus 1-2-3.
\(\checkmark\) SS template, the file is saved as a template, which you can use as a starting point to create other spreadsheets. Once you save a file as a template, Works uses the template every time you create a new spreadsheet. If you do not want to use the template, choose Works Settings from the Options menu and clear the Use Templates For Spreadsheet box.

\section*{Shortcut...}
- To save a document, press CTRL+S.

Top Margin
To specify the amount of white space between the top of a page and the top of the first line of text, type a measurement in the box.

The top margin is preset at \(1^{\prime \prime}\).

\section*{Bottom Margin}

To specify the amount of white space between the bottom of a page and the top of the last line of text, type a measurement in the box.

The bottom margin is preset at 1".

\section*{Left Margin}

To specify the amount of white space between the left edge of a page and the left edge of text, type a measurement in the box.

The left margin is preset at 1.25".

\section*{Right Margin}

To specify the amount of white space between the right edge of a page and the right edge of text, type a measurement in the box.

The right margin is preset at 1.25 ".

\section*{Header Margin}

اTo specify the amount of white space between the top of a page and a header, type a measurement in the box. Note: The header margin must always be smaller than the top margin. The header margin is preset at 0.5".

\section*{Footer Margin}

To specify the amount of white space between the bottom of a page and the footer, type a measurement in the box.

Note: The footer margin must always be smaller than the bottom margin. The footer margin is preset at 0.75".

\section*{1st Page Number}

When you create a header or footer to number the pages, Works assumes you want to begin with the number one. However, if you want to combine several documents into one document, you can set the starting page number for each document so that when you combine documents the pages are numbered consecutively.
- To change the starting page number, type the number you want.

Note: Works will only number the pages if you have created a header or footer. For more information, see Headers and Footers.

\section*{Page Length and Page Width}

Works is preset to print on 8.5 " by 11" paper in Portrait (vertical) orientation.
- To change the paper size, type a new page length or width.

To change the page orientation, switch the length and width measurements. For example, if you want to print horizontally on \(8.5^{\prime \prime}\) by \(11^{\prime \prime}\) paper, change the page length to \(8.5^{\prime \prime}\) and the page width to 11 ".
Note: When you change the paper size or orientation, you must also choose Printer Setup from the File menu and change the Paper Size and Orientation settings. To print horizontally, choose Landscape orientation.

\section*{Page Length and Page Width}

Works is preset to print on 8.5 " by 11" paper in Portrait (vertical) orientation.
- To change the paper size, type a new page length or width.

To change the page orientation, switch the length and width measurements. For example if you want to print horizontally on \(8.5^{\prime \prime}\) by \(11^{\prime \prime}\) paper, change the page length to \(8.5^{\prime \prime}\) and the page width to \(11^{\prime \prime}\).
Note: When you change the paper size or orientation, you must also choose Printer Setup from the File menu and change the Paper Size and Orientation settings. To print horizontally, choose Landscape orientation.

\section*{Print Gridlines}

Gridlines are the lines used to divide your spreadsheet into a grid of rows and columns.
- Click to print the gridlines. An X appears in the box when this option is chosen.

\section*{Print Row and Column Headers}
- Click to print row and column headers. An \(X\) appears in the box when this option is chosen.

\section*{Paste}

Click the option you want. If you want to:
- Paste values and formats, click Values Only.
- Add values to existing values in the cells you paste into, click Add Values.
- Subtract values from existing values in the cells you paste into, click Subtract Values.

\section*{Row}

To delete the row in which the highlight is located, click Row.

\section*{Column}
- To delete the column in which the highlight is located, click Column.

\section*{Row}

To insert a row above the position of the highlight, click Row.

\section*{Column}
- To insert a column to the left of the highlight, click Column.

\section*{Units}
    Click the series you want Works to create.
    To Click
    Create a series of numbers Number
    Create a series of dates, including Day
    Saturdays and Sundays.
    Create a series of dates, excluding Weekday
    Saturdays and Sundays.
    Create a series of months Month
    Create a series of years Year
    Notes:
- If the starting value is text, the Number option is unavailable.
If the starting value is a number other than a date, the Day, Weekday, Month, and Year options are
unavailable.

\section*{Step By}

Type a number to determine the increment for the series. Works proposes 1.
For example, if you type 5 and have entered a starting value of 100, Works creates this series: 100, 105, 110, and so on.

Name
- To name a highlighted range, type a name up to 15 characters long. Do not type a colon at the end of the name. If the first highlighted cell contains text, Works suggests this as the range name.

\section*{Names}

Lists existing range names.
- Click the range name you want to delete or to assign to a new range.

\section*{List}

To insert a list of range names and their references in your spreadsheet, click List.
Works creates the list in two columns of your spreadsheet, starting at the location of the highlight (

\section*{Delete}
- To delete the range name highlighted in the Names box, click Delete.

After you delete a range name, the Cancel button changes to Close. You can delete more than one range name before choosing Close.

\section*{Close}

To close the dialog box while carrying out the deletions you made, click Close.
The Cancel button changes to Close after you delete a range name. You can delete more than one range name before choosing Close.

\section*{Header}

To create a header that prints at the top of every page, type any text and or codes you want. For information on codes, click the colored text "codes" on this page.

\section*{Footer}

To create a footer that prints at the bottom of every page, type any text and or codes you want. For information on codes, click the colored text "codes" on this page.

\section*{No Header on 1st Page}
- Click to eliminate the header from the first printed page of a document. An X appears in the box when the option is chosen.

\section*{No Footer on 1st Page}
- Click to eliminate the footer from the first page of a document. An X appears in the box when the option is chosen.

\section*{Use Header and Footer Paragraphs}

This option is only available in the Word Processor.

\section*{Go To}
- To jump directly to a cell or range name, type the cell reference (for example, D2) or range name you want to move to

When you choose OK, Works moves the highlight
(

\section*{\(>\)}

If you want to move to a range name, you can also double-click its name in the Names list.

\section*{Names}

Lists existing range names.
- To jump to a specific range, double-click a range name.

If you can't see all of the available range names, click the up or down arrow.

\section*{Shortcuts...}

To
Choose Select Go To
Go to the beginning of document CTRL+HOME
Go to the end of document CTRL+END

\section*{Find What}
- Type the specific text or value you want to find.

If you are searching for text entries (not numbers), you can use a "wildcard" symbol to represent one or more characters.
- The question mark (?) wildcard represents any single character in the same position. For example, if you want to search for a name, but are unsure whether it is spelled Anderson or Andersen, type anders? \(\mathbf{n}\) and Works will find both names.
- The asterisk (*) wildcard represents any number of characters in the same position.

For example, if you type \(\mathbf{s * s}\), Works finds all text that begins with an "s" and ends with an "s", such as sales and salaries.

\section*{Look By}

To specify how Works searches a spreadsheet, click Rows or Columns.
For example, if you want Works to search across the spreadsheet first, click Rows.

\section*{Shortcut...}
- To repeat a search, press F7.

\section*{1st Column}

1 Type the name of the most significant column you want Works to sort by.
Works sorts by the 1st Column first, and by a second and third column only if two or more entries share the same information in the first sort column.

2 Choose Ascending or Descending.
To sort in ascending order (0-9 and from A-Z ), click Ascend.
- To sort in descending order (Z-A and from 9-0), click Descend.

\section*{2nd Column}

1 Type the name of the column you want Works to sort by if two or more cells share the same information in the first sort column.

2 Choose Ascending or Descending.
To sort in ascending order (0-9 and from A-Z ), click Ascend.
To Tort in descending order (Z-A and from 9-0), click Descend.

\section*{3rd Column}

1 Type the name of the column you want Works to sort by if two or more cells share the same information in the first and second sort columns.

2 Choose Ascending or Descending.
- To sort in ascending order (0-9 and from A-Z ), click Ascend.

To sort in descending order (Z-A and from 9-0), click Descend.

\section*{Number of Decimals}
- To specify the number of decimal places, type a number between 0 and 7 . For example, if you type 3 , Works rounds off 123.4567 to 123.457 .

\section*{Number of Decimals}
- To specify the number of decimal places, type a number between 0 and 7 . For example, if you type 2 , Works displays 1255.5 as \(\$ 1,255.50\).

\section*{Shortcuts...}

To choose Format Currency
- On the Toolbar, click
--or--
Press CTRL+4.

\section*{Number of Decimals}
- To specify the number of decimal places, type a number between 0 and 7 . For example, if you type 1, Works rounds off 23456.79 to 23,456.8.

\section*{Shortcuts...}

To choose Format Comma
- On the Toolbar, click
--or--
Press CTRL+, (comma)

\section*{Number of Decimals}
- To specify the number of decimal places, type a number between 0 and 7 . For example, if you type 1, Works rounds off . 4568 to \(45.7 \%\).

\section*{Shortcuts...}

To choose Format Percent
- On the Toolbar, click
--or--
Press CTRL+5.

\section*{Number of Decimals}
- To specify the number of decimal places, type a number between 0 and 7 . For example, if you type 3, Works displays 7200000 as \(7.200 \mathrm{E}+07\).

\section*{Number of Digits}

ا To specify the number of digits, type a number between 0 and 7.
For example, if you specify 5 number places, 999 becomes 00999 . No decimals will be displayed.

\section*{Show}

Click the date or time option you want.
For example, if you choose Month, Day, Works displays 10/03/91 as 10/91.

\section*{Time}
- Click the option you want.

If you choose 24 hour, Works displays Hour, Minute as 14:10.
If you choose 12 hour, Works displays Hour, Minute as 2:10 PM.

\section*{Date}
- Click the option you want.

If you choose Short, Works displays Month, Day, Year as 6/10/92. Note: Month Only has no short form. If you choose Long, Works displays Month, Day, Year as June 10, 1992.

\section*{Font}

Lists the fonts your printer supports.
- Click the font you want. If you can't see all of the available fonts, click the up or down arrow.

\section*{Size}

Lists the font sizes your printer supports.
Click the font size you want. If you can't see all of the available font sizes, click the up or down arrow. Examples: 8pt 10pt 12pt

\section*{Shortcuts...}

To change font or font size
1 On the Toolbar, click an arrow to see the list of choices.

2 Click the font or font size you want.
--or--
Type the font or size in the appropriate box.

\section*{Alignment}

Until you change the alignment, Works uses General alignment (text left-aligned, numbers right-aligned).
- To change the alignment of information in a cell, click the option you want.

\section*{Locked}

Works initially locks all fields, although the lock has no effect until you choose Protect Data from the Options menu. When Protect Data is turned on, locked entries cannot be changed, formatted, or unlocked. When a field is locked, an \(X\) appears in the Locked box.
- If you want to protect some cells but not others, clear the Locked box for each range of cells you do not want to protect before you choose Protect Data. A box appears empty when it is cleared.

\section*{Styles}

Lists the font styles you can choose from.
- To apply one or more styles, click the ones you want. An X appears in a box when the style is chosen. Examples: Bold and underline Bold and italic

\section*{Shortcuts...}
\begin{tabular}{|c|c|c|c|}
\hline \multicolumn{2}{|l|}{To apply styles} & \multicolumn{2}{|l|}{To align information} \\
\hline \multicolumn{2}{|l|}{click On the Toolbar,} & \multicolumn{2}{|r|}{On the Toolbar, click} \\
\hline --or-- & & --or-- & \\
\hline To apply & Press & To align & Press \\
\hline Bold & CTRL+B & Left & CTRL+L \\
\hline Italic & CTRL+1 & Center & CTRL+E \\
\hline Underline & CTRL+U & Right & CTRL+R \\
\hline
\end{tabular}

\section*{Width}

To specify column width in number of characters, type a number between 0 and 79 .
Note: The maximum width may vary depending upon the font and font size you are using.

\section*{Charts}

Lists the charts you've created for the current spreadsheet.
- Click the name of the chart you want to rename. If you can't see all of the available charts, click the up or down arrow.

\section*{Name}
- Type a new name for the chart up to 15 characters long.

\section*{Rename}
- To accept the new chart name, click Rename.

You can rename as many charts as you want before choosing OK.

OK
To accept new chart names you've added using the Rename button, click OK. You can rename as many charts as you want before choosing OK.

\section*{Cancel}
- To close the dialog box without accepting any changes you made using the Rename button, click Cancel.

\section*{Charts}

Lists charts you've created for the current spreadsheet.
- Click the name of the chart you want to delete.

\section*{Delete}
- To delete the chart you've chosen in the Charts box, click Delete. You can delete as many charts as you want before choosing OK.

OK
- To accept changes you've made using the Delete button, click OK. You can delete as many charts as you want before choosing OK.

\section*{Cancel}
- To cancel the dialog box and any changes you made using the Delete button, click Cancel.

\section*{Charts}

Lists charts you've created for the current spreadsheet.
- Click the name of the chart you want to duplicate.

\section*{Name}

To name the duplicate chart, type a name up to 15 characters long.
If you do not name the duplicate chart Works assigns it a name: Chart1, Chart2, and so on.

\section*{Duplicate}
- To duplicate the chart you chose in the Charts box, click Duplicate.

OK
- To accept charts you've created using the Duplicate button, click OK. You can duplicate as many charts as you want before choosing OK.

\section*{Cancel}
- To cancel the dialog box and any changes you made using the Duplicate button, click Cancel.

\section*{Value (Y) Series}

Assigns a range of cells to a value \((\mathrm{Y})\) series. A value \((\mathrm{Y})\) series appears in a chart as a group of bars, lines, or pie wedges.

To specify a range for a value (Y) series, type a cell (for example, C2) or range reference (for example, \(\mathrm{C} 2: \mathrm{D} 4)\) in one of the value ( Y ) series boxes.

You can also insert the reference of a highlighted spreadsheet range in one of the value \((\mathrm{Y})\) series boxes using the Paste button.

\section*{Category (X) Series}

Assigns a range of cells to the category \((X)\) series.
- To specify a range for the category (X) series, type a cell (for example, C2) or range reference (for example, C2:D4) in this box.

You can also insert the reference of a highlighted spreadsheet range in this box using the Paste button.

\section*{Paste}
> To insert the reference of a highlighted spreadsheet range into one of the value ( Y ) series boxes or in the category (X) series box, click the box you want and then click Paste.

\section*{Chart Title}

To create a title for your chart, type a title or cell reference.
When you type a cell reference, that cell's entry becomes the title. The title can be up to 39 characters long.

\section*{Subtitle}
- To create a subtitle for your chart, type a subtitle or cell reference.

When you type a cell reference, that cell's entry becomes the subtitle. The subtitle can be up to 39 characters long.

\section*{Horizontal (X) Axis}
- To create a title underneath the horizontal (X) axis, type a title or cell reference. When you type a cell reference, that cell's entry becomes the axis title. The title can be up to 39 characters long. Pie charts do not have horizontal ( X ) axes.

\section*{Vertical (Y) Axis}
- To create a title alongside the vertical (Y) axis, type a title or cell reference. When you type a cell reference, that cell's entry becomes the axis title. The title can be up to 39 characters long. Pie charts do not have vertical ( Y ) axes.

\section*{Right Vertical (Y) Axis}
\(\rightarrow\) To create a title alongside the right vertical (Y) axis, type a title or cell reference. When you type a cell reference, that cell's entry becomes the axis title. The title can be up to 39 characters long. Pie charts cannot have right vertical \((Y)\) axes.

\section*{Value Series}
- To change a legend, or enter text, a value, or a cell reference for each value (Y) series you want to change. When you create a chart, Works automatically creates a legend if the first row or column of your highlighted cells contains text.

\section*{Value (Y) Series}
- To create a data label, type a cell reference (for example, C 2 ) in the appropriate value ( Y ) series box. --or--
Insert the reference of a highlighted spreadsheet range into one of the value \((\mathrm{Y})\) series boxes using the Paste button.

\section*{Use Series Data}

To automatically use a chart's values as data labels, click this option; then click OK.

\section*{Paste}

To insert the reference of a highlighted spreadsheet range into one of the value \((\mathrm{Y})\) series boxes, click the box and then click Paste.

\section*{1st Label}

To specify the main label for each slice of a pie chart, click the option you want. To:
Label each pie slice with the contents of cells in the value (Y) series, click Values.
Label each pie slice with the slice's percentage of the whole, click Percentages.
Label each pie slice with the contents of cells in the Cell Range box, click Cell Contents. If you do not specify a series, the category ( X ) series is inserted. If no category \((X)\) series exists, Works labels each slice with a number corresponding to its position in a range.

Label each pie slice with a number corresponding to its position in a range, click 1, 2, 3.
- Prevent the chart from having a 1st Label, click None.

\section*{(2nd Label)}

To specify the secondary label for each slice of a pie chart, click the option you want. To:
- Label each pie slice with the contents of cells in the value ( Y ) series, click Values.

Label each pie slice with the slice's percentage of the whole, click Percentages.
Label each pie slice with the contents of cells in the Cell Range box, click Cell Contents. If you do not specify a series, the category ( X ) series is inserted. If no category ( X ) series exists, Works labels each slice with a number corresponding to its position in a range.

Label each pie slice with a number corresponding to its position in a range, click 1, 2, 3.
- Prevent the chart from having a 2nd Label, click None.

\section*{Cell Range}

To specify a spreadsheet range to use as the 1st or 2nd Label, enter the range reference (for example, A2:D4) in the Cell Range box.

\section*{Paste}

To insert the reference of a copied spreadsheet range in the Cell Range box, click the Cell Range box and then click Paste.

\section*{Series}

Lists the range references of each of the chart's value \((Y)\) series and category \((X)\) series.
To go to the chart's spreadsheet and highlight the series you choose, click the appropriate category (X) or value \((\mathrm{Y})\) series, and then click OK.

\section*{Shortcut...}
- To choose Edit Paste Series, press CTRL+V.

\section*{Data or Labels}

To display the range references of your chart's value ( Y ) and category ( X ) series in the Series box, click
Data.
All category \((X)\) and value \((Y)\) series included in your chart appear as black text next to the appropriate number in the Series box. All other series will be dimmed.
--Or--
- To display the range references of your chart's data labels in the Series box, click Labels.

Data label range references appear as black text next to the appropriate number in the Series box. All other series will be dimmed. If you have not created data labels for your chart, the Labels button will remain dimmed.

\section*{Shortcut...}
> To choose Edit Go To, press F5.

\section*{1 (Standard bar chart)}

D Double-click to create a standard bar chart that represents each number in each series with a bar.

\section*{2 (Stacked bar chart)}
- Double-click to create a bar chart with stacked bars showing the combined total in each category.

\section*{3 (100\% bar chart)}

Double-click to create a bar chart with stacked bars showing the percentage contribution of all value (Y) series to the total in each category.

\section*{4 (Standard bar chart with vertical (Y) axis grid lines)}
- Double-click to create a standard bar chart with horizontal gridlines.

\section*{5 (Standard bar chart with data labels)}
- Double-click to create a standard bar chart with data points labeled.

\section*{Next}
- To view the chart types of the next command on the Gallery menu, click Next.

\section*{Previous}
- To view the chart types of the previous command on the Gallery menu, click Previous.

Shortcut...
To create a bar chart
- On the Toolbar, click

\section*{1 (Standard line chart)}

Double-click to create a line chart that represents the numbers in each value \((\mathrm{Y})\) series with markers connected by a line.

\section*{2 (Line chart without markers)}
- Double-click to create a line chart with the numbers in each value \((\mathrm{Y})\) series represented by a line.

\section*{3 (Line chart with markers only)}

Double-click to create a line chart with numbers in each value ( \(Y\) ) series represented by markers only.

\section*{4 (Standard line chart with vertical ( Y ) axis gridlines)}
- Double-click to create a line chart with horizontal gridlines.

\section*{5 (Standard line chart with vertical (Y) axis gridlines and horizontal (X) axis gridlines)}
- Double-click to create a line chart with horizontal and vertical gridlines.

\section*{6 (Hi-lo-close chart)}

A hi-lo-close chart emphasizes the range between the highest and lowest number in each category. It is often used to plot stock market information.
- Double-click to create a line chart with the numbers in each value ( Y ) series represented by markers. A vertical line connects the markers in each category.

Shortcut...
To create a line chart
- On the Toolbar, click

\section*{1 (Standard pie chart)}

Double-click to create a pie chart that represents one value \((\mathrm{Y})\) series. A standard pie chart has no labels or exploded slices.

\section*{2 (Pie chart with data labels)}
- Double-click to create a standard pie chart with each slice labeled.

\section*{3 (Pie chart with percentage data labels)}

D Double-click to create a standard pie chart with each slice labeled as a percentage of the total.

\section*{4 (Pie chart with category labels and percentage data labels)}

Double-click to create a standard pie chart with each slice labeled with data labels and percentage data labels.

\section*{5 (Pie chart with first slice exploded)}

Double-click to create a standard pie chart with no data labels, and with the first slice separated from the pie.

\section*{6 (Pie chart with all slices exploded)}

Double-click to create a standard pie chart with no data labels, and with all slices separated from each other.

\section*{Shortcut...}

To create a pie chart
- On the Toolbar, click

\section*{1 (Standard stacked line chart)}
- Double-click to create a standard stacked line chart that represents numbers in each value \((\mathrm{Y})\) series with markers connected by a line.

Individual lines are stacked on top of each other to represent a total.

\section*{2 (Stacked line chart with vertical ( Y ) axis gridlines)}
- Double-click to create a standard stacked line chart with horizontal gridlines.

\section*{3 (Stacked line chart with horizontal (X) axis gridlines)}
- Double-click to create a standard stacked line chart with vertical gridlines.

\section*{4 (Stacked line chart with vertical (Y) axis and horizontal (X) axis gridlines)}
- Double-click to create a standard stacked line chart with both horizontal and vertical gridlines.

Shortcut...
To create a stacked line chart
- On the Toolbar, click

\section*{1 (Standard XY chart)}
- Double-click to create a standard XY chart that represents numbers in each value \((\mathrm{Y})\) series with markers.

\section*{2 (XY chart with connected markers)}

D Double-click to create a standard XY chart with markers from the same series connected by lines.

\section*{3 (XY chart with vertical ( Y ) axis gridlines)}
- Double-click to create a standard XY chart with markers only and horizontal gridlines.

\section*{4 (XY chart with horizontal (X) axis gridlines)}
- Double-click to create a standard XY chart with markers only and vertical gridlines.

\section*{5 (XY chart with vertical ( Y ) axis and horizontal ( X ) axis gridlines)}
- Double-click to create a standard XY chart with markers only and vertical and horizontal gridlines.

\section*{6 (XY chart with logarithmic vertical ( Y ) axis gridlines)}
- Double-click to create a logarithmic XY chart with markers only and horizontal gridlines.

\section*{Shortcut...}

To create an XY (scatter) chart
- On the Toolbar, click

\section*{1 (Mixed line and bar chart)}
- Double-click to create a mixed line and bar chart with the first value ( Y ) series represented by bars and the subsequent value \((\mathrm{Y})\) series represented by markers connected by lines.

\section*{2 (Mixed line and bar chart with right vertical ( Y ) axis)}
- Double-click to create a mixed line and bar chart with the first value \((\mathrm{Y})\) series represented by bars and subsequent value \((Y)\) series represented by markers connected by lines. This subtype has both left and right vertical (Y) axes.

\section*{3 (Line chart with right vertical ( Y ) axis)}

D Double-click to create a standard line chart with both left and right vertical (Y) axes.

4 (Mixed hi-lo-close and bar chart with right vertical ( Y ) axis)
- Double-click to create a hi-lo-close and bar chart with the fourth value (Y) series represented by bars and first three value \((\mathrm{Y})\) series represented by hi-lo-close markers. This chart type has both left and right vertical (Y) axes.

\section*{Shortcut...}

To create a combination chart
- On the Toolbar, click

\section*{Show Gridlines}

To display vertical gridlines between each category, click Gridlines. An X appears in this box when the option is chosen.

\section*{Label Frequency}
- To prevent closely-spaced category labels from overlapping, you can tell Works to display only some of the chart's category labels.

For example, type \(\mathbf{4}\) in the Label Frequency box to display only every 4th label.

\section*{Minimum}
- To specify the lowest value you want on the scale, type a number.

If you do not type a number, Works sets the minimum at Auto, which in most cases is 0 .

\section*{Maximum}

To specify the highest value you want on the scale, type a number.
If you do not type a number, Works sets the maximum at Auto, which corresponds to the next interval above the highest value the chart displays.

\section*{Interval}

To specify the interval you want between scale values, type a number.
If you do not type a number, Works sets the interval at Auto and derives the interval from the range of values the chart displays.

\section*{Show Gridlines}

To display horizontal lines at each interval, click Show Gridlines. An X appears in the box when this option is chosen.

\section*{Use Logarithmic Scale}
- To plot data along a logarithmic scale, click Use Logarithmic Scale. An X appears in the box when this option is chosen.

Logarithmic scale intervals must be specified in powers of 10 , such as 10,100 , or 1000 , and cannot be less than 10. You can use logarithmic scales in all chart types except Pie charts.

\section*{Type}

Determines the type of chart assigned to the left vertical \((\mathrm{Y})\) axis. This option is available for bar, line, and stacked line charts only.

To specify the type of chart you want, click the option you want.
You can combine chart types by choosing a different type for the left and right vertical (Y) axis or by choosing Mixed Line and Bar from the Format menu.

\section*{Type}

Determines the type of chart assigned to the left vertical \((\mathrm{Y})\) axis. This option is available for bar, line, and stacked line charts only.

To specify the type of scale you want, choose the option you want.
You can combine chart types by choosing a different type for the left and right vertical (Y) axis or by choosing Mixed Line and Bar from the Format menu.

\section*{1st Value Series--6th Value Series}

Assigns a value \((\mathrm{Y})\) series to the left or the right vertical \((\mathrm{Y})\) axis.
To remove a right vertical \((\mathrm{Y})\) axis, click Left for all of the chart's value ( Y ) series.
--Or--
To add a right vertical \((\mathrm{Y})\) axis, click Right for at least one value \((\mathrm{Y})\) series. The series you choose determines the scale of the right vertical \((\mathrm{Y})\) axis.

\section*{1st Value Series - 6th Value Series}

To display a value ( Y ) series as a line, click Line.
--Or--
- To display a value (Y) series as a set of bars, click Bar.

\section*{Series}

Lists the value \((\mathrm{Y})\) series in the chart.
To change the color, pattern, or markers of a value \((\mathrm{Y})\) series, click the series you want to change.

\section*{Colors}

Lists the available colors.
To assign a color to a value ( Y ) series, click the color you want. If you can't see all of the available choices, click the up or down arrow.

\section*{Patterns}

Lists the available patterns.
To assign a pattern to a value ( Y ) series, click the pattern you want. If you can't see all of the available choices, click the up or down arrow.

\section*{Markers}

Lists the available markers.
- To assign a marker to a value (Y) series, click the type of marker you want. If you can't see all of the available choices, click the up or down arrow.

Markers are not available for bar or pie charts.

\section*{Format}

To apply your changes to the highlighted value (Y) series or pie slice, click Format. When you choose Format, the Cancel button changes to Close. You can change the format of as many series as you want before choosing Close.

\section*{Format All}

To apply the colors, patterns, and markers of the highlighted value ( Y ) series or pie slice to all value ( Y ) series or pie slices, click Format All.

To close the dialog box, click Close.

\section*{Close}

To close the dialog box and carry out the changes you made, click Close.
The Cancel button changes to Close after you change a series' pattern or color using Format or Format All. You can change the format of as many series as you want before choosing Close.

\section*{Slices}

Lists pie slices in your chart.
- To change the color or pattern of a pie slice, click the slice you want to change.

\section*{Colors}

Lists the available colors.
To change the color of a pie slice, click the color you want. If you can't see all of the available colors, click the up or down arrow.

\section*{Patterns}

Lists the available patterns.
To assign a pattern to a pie slice, click the pattern you want. If you can't see all of the available patterns, click the up or down arrow.

\section*{Explode Slice}

To separate a slice from a pie chart, click Explode Slice. An X appears in the box when this option is chosen.

\section*{Format}

To apply your changes to the pie slice you selected under Slice, click Format.
When you choose the Format button, the Cancel button changes to Close. You can change the pattern of as many slices as you want before choosing Close.

\section*{Format All}

To apply the colors, patterns, and markers of the highlighted pie slice to all pie slices, click Format All. To close the dialog box, click Close.

\section*{Close}
- To close the dialog box while carrying out the changes you made, click Close.

Cancel changes to Close after you change a series' pattern or color using Format or Format All. You can change the pattern of as many slices as you want before choosing Close.

\section*{Font}

Lists the fonts your printer supports.
To assign a font to a chart's title, click the font you want. If you don't see all of the available fonts, click the up or down arrow.

\section*{Size}

Lists the font sizes your printer supports.
To assign a font size to a chart's title, click the size you want. If you don't see the size you want, click the up or down arrow.

Examples: 8pt 10pt 12pt

\section*{Style}

To apply one or more styles, click the ones you want. An \(X\) appears in the box when an option is chosen. Examples: Bold and underline Bold and italic

\section*{Font}

Lists the fonts your printer supports.
- To assign a font to all the text in a chart except the title, click the font you want. If you can't see all of the available fonts, click the up or down arrow.

\section*{Size}

Lists the font sizes your printer supports.
\$ To assign a font size to all the text in a chart except the title, click the font size you want. If you can't see all of the available font sizes, click the up or down arrow.

Examples: 8pt 10pt 12pt

\section*{Style}

To apply one or more styles, click the ones you want. An X appears in a box when the style is chosen.
Examples: Bold and underline \(\quad\) Bold and italic

\section*{Number of Copies}
- To print more than one copy of your chart, type the number you want printed. Works proposes 1 as the number of copies.

\section*{Shortcuts...}
- On the Toolbar, click
-or--

OK
- To carry out the choices you've made and print the current chart, click OK.

\section*{Use Selection for Series}

Lists the range references of each of the chart's existing value \((Y)\) series and category \((X)\) series.
To create a new value \((\mathrm{Y})\) or category \((\mathrm{X})\) series from a highlighed range, or to replace a series, click one of the seven series buttons and then click OK.

\section*{Data or Labels}
- To create a value ( Y ) or category ( X ) series from a highlighted range, click Data. The highlighted range becomes a series in your chart represented by a bar, line, or pie slice.
--Or--
- To create data labels from information in a highlighted range, click Labels.

The highlighted range will then become a series of data labels displayed at the top of a bar, at a data point, or next to a pie slice.

\section*{Header}

To create a header that prints at the top of every page, type any text and codes you want. For information on codes, click the colored text "codes" on this page.

\section*{Footer}

To create a footer that prints at the bottom of every page, type any text and codes you want. For information on codes, click the colored text "codes" on this page.

\section*{Border}
- Click the borders you want to add to a highlighted cell or range of cells. An X appears in the box when an option is chosen.

You can choose one or more border types. For example, to place lines above and below a cell, highlight the cell and then choose both Top and Bottom.

If you highlight more than one cell and then choose Top and Bottom, Works places a border at the top and bottom of each row in the highlighted section.

\section*{Number of Copies}
- To specify the number of copies of your spreadsheet you want to print, type a number. For example, if you type 3 and your spreadsheet is three pages long, Works will print nine pages altogether. Works proposes 1 as the number of copies.

\section*{Print Range}

To print the entire spreadsheet, click All.
--Or--
- To print a range of pages, click Pages and then type the page numbers in the From and To boxes.

\section*{Draft Quality Printing}

Click to print your document without bold, italic, and underline formatting. An \(X\) appears in the box when this option is chosen.

Depending on your printer, Works may print faster with Draft Quality Printing chosen.

OK
To carry out the choices you've made and print the current spreadsheet, click OK or press ENTER.

\section*{Shortcuts...}
- On the Toolbar, click
-or--

\section*{Page Number}

When you create a header or footer to number the pages, Works assumes you want to begin with the number one. However, if you want to combine several documents into one document, you can set the starting page number for each document so that the pages are numbered consecutively.
- To change the starting page number, type the number you want.

Note: Works will only number the pages if you have created a header or footer. For more information, see Headers and Footers.

\section*{Size}

To specify the size and proportion of the chart you are printing, click one of the three options. To:
- Print your chart the same size as it is on the screen, click Screen Size. Charts printed using Screen Size appear in the upper left-hand corner of the printed page.
\(>\) Print your chart as large as possible while retaining the same height/width proportion as on the screen., click Full Page, Keep Proportions.
\(\rightarrow\) Print your chart as large as possible disregarding proportion, click Full Page.

\section*{Basics}
\begin{tabular}{|c|}
\hline \(\mathbf{w p}\) \\
\hline\(s s\) \\
\hline \(\mathbf{c h}\) \\
\hline \(\mathbf{d b}\) \\
\hline \(\mathbf{r p}\) \\
\hline
\end{tabular}

To open a topic, click the one you want from the indented sections of the list below.

\section*{Getting started}
- Chart basics
- Chart types
- Creating and deleting a chart

\section*{Making changes}
" Changing a chart
- Adding titles and labels
" Copying and duplicating
- Creating a custom chart

Enhancing the appearance
- Changing chart appearance

Printing
Headers and footers
Changing the page layout
Previewing Printing
Working with other applications \(\rangle \quad\) Sharing with other applications
```

    100% bar chart
    Active window, defined
    Aligning text in header/footer, how to
    Arranging icons, how to
    Audio check
    Automatic dialing (See Dialing phone numbers)
    Axis
horizontal (See Horizontal (X) axis)
scale (See Scale)
vertical (See Vertical (Y) axis)
Axis title
= (See also Title)

```



\section*{Canceling}
automatic dialing, how to dialog box and command
keyboard method, how to
mouse method, how to
Cascading windows
described
how to
Category label
adding/changing
described
how to
creating from spreadsheet
described
how to
deleting, how to
frequency, how to change
illustrated
incomplete display, how to correct

Category ( X ) series category labels
changing labels, how to
described
described
how to
overview
deleting, how to

Centering header/footer information
how to
Centimeters, as unit of measure
changing, how to

\section*{Chart basics \\ lesson: Charting
overview
parts
types (See Chart types)
uses for charts}

Chart types
changing
Coscribed

\section*{Color}
black-and-white display
described
how to
how to
described
described

\section*{Combination chart}
(See also Customizing a chart)
bars and lines, how to mix
described
variations

\section*{Commands}
choosing, how to
lessons
Getting to work
Using the keyboard
overview mouse


\section*{Country settings}

\section*{changing, how to \\ overview}

\section*{Creating}

described
described
overview
documents in Works
described
Customizing a chart
\(\downarrow\) appearance
combining variations
described
how to
mixing bars and lines, how to
right vertical ( Y ) axis
described

\begin{tabular}{|c|c|}
\hline \multicolumn{2}{|r|}{described} \\
\hline & how to \\
\hline \multicolumn{2}{|r|}{headers, how to} \\
\hline \multicolumn{2}{|r|}{legends, how to} \\
\hline & lesson: Charting \\
\hline \multicolumn{2}{|l|}{titles} \\
\hline & described \\
\hline \multicolumn{2}{|r|}{how to} \\
\hline & value (Y) series, how to \\
\hline
\end{tabular}

\section*{Dialing phone numbers}
canceling, how to
changing settings, how to
described
how to use
overview


\section*{Displaying}
status bar, how to

\section*{Document}
closing
described
described
how to
how to
overview
overview
creating
creating
\mathrm{ overview }
\mathrm{ overview }
    lessons
    lessons
)
)
Getting to work
Getting to work
    naming
    naming
\mathrm{ described}
\mathrm{ described}
    number of characters allowed
    number of characters allowed
    overview
    overview
Document continued...
    opening
\begin{tabular}{|c|c|}
\hline & described \\
\hline & how to \\
\hline & overview \\
\hline  & preventing \\
\hline saving & \\
\hline & described \\
\hline & how to \\
\hline & overview \\
\hline
\end{tabular}

\footnotetext{
Document window
described
status bar/Toolbar, how to hide and show
Duplicating (See Copying)
}

\section*{Editing}
category labels
described
how to
legends
described
how to
Enlarging a window, how to
Exchanging information (S
\(>\quad\) described
\(t\) how to
Exploded wedges in pie chart, illustrated

```

File (See Document)

```

\section*{Filename}
```

$>$ extension
printing in header/footer, how to same as spreadsheet

```

\section*{Font}
```

changing, how to
described
printing limitations, how to avoid title, how to assign
Footer
creating, how to
deleting, how to
described

```

```

displaying
lesson: Page layout and printing
margins and placement on page
adjusting, how to
described
Footer continued...
> overview
previewing, how to
printing, how to use codes starting page, how to change
Formatting
characters, how to apply
footers (See Footer)
headers (See Header)

```

Frame (See Border)
Frequency of category labels, how to change

\section*{Header}
\(>\) creating, how to
deleting, how to
described
displaying lesson: Page layout and printing
margins and placement on page
adjusting, how to

\section*{Header continued...}
overview
previewing, how to
starting, how to use codes
stage, how to change

Help basics
movies
Getting around Help
Welcome to Help
Working strategies
overview

\section*{Hi-lo-close chart}
combined with bar chart
described

\section*{Hiding}

Status bar, how to
Horizontal (X) axis gridlines
> adding/deleting, how to
described
illustrated



\section*{Label}


Landscape orientation
- described
font limitations, how to avoid
printing, how to
Learning Microsoft Works for Windows
lessons
How to learn Works
What you need to know about computers
overview
Legal size page, how to print
Legend
automatically created for value ( Y ) series
changing
described
how to
creating from spreadsheet
Legend continued...
- deleting, how to
hiding/showing
described
\(t\) how to
illustrated
_ incomplete display, how to correct

\section*{Lessons}

When you click on one of the lesson titles listed below, the lesson will begin playing immediately. When it is
finished, you can find more information and instructions on how to perform a task by clicking on the See also reference that follows the lesson title.
(See also Chart basics)

\section*{Lessons continued...}

N
described
Getting to work
(See also Commands)
(See also Document)
How to learn Works
(See also Learning Microsoft Works for Windows)
Introducing the tools together
(See also Tools) overview

Lessons continued...
Page layout and printing
(See also Footer)
(See also Header)
(See also Margin)
(See also Prientation)
Sharing information Printing)
(See also Copying)
(See also Linking) Sharing information between Works tools)
starting, how to

Lessons continued...
What you need to know about computers
(See also Learning Microsoft Works for Windows)
Working with files
(See also Document)
Working with windows
(See also Window)
Using the keyboard
(See also Commands)
Using the mouse
(See also Commands)

\section*{Line}
gridlines (See Gridlines)
line chart (See Line chart)

\section*{Line chart}
colors/patterns/markers
changing, how to
described
combined with
bar chart, described
bar chart, how to
variations, how to
described
variations

\section*{Linear scale}
```

described
interval amount
Linking
$\rangle$
lesson: Sharing information
overview
o another application
described
how to
to word processor tool
described
how to
List separator, international settings

```

\section*{Logarithmic scale}
described
interval amount

```

N/人/人/人/va
Margin
adjusting
| described
Magnify page in preview, how to
how to
header/footer placement
\ adjusting, how to
described
lesson: Page layout and printing
page layout
Markers
\
changing, how to
described
Maximize box, illustrated
Maximum/minimum scale value
changing, how to
described
Menu, illustrated
Menu bar
\mathrm{ illustrated }

```

\footnotetext{
Microsoft Works for Windows
charting tool
}
```

help movies
Getting around Help
Welcome to Help
Working strategies
overview of tools
quitting

```
described

\section*{Microsoft Works for Windows continued... \\ sharing information between tools \\ spreadsheet tool \\ starting \\ described \\ from Windows, how to \\ last workspace arrangement displayed, described last workspace arrangement displayed, how to \\ overview \\ word processor tool \\ Minimize box, illustrated \\ Minimizing a window to an icon \\ described \\ how to \\ Mixed chart (See Combination chart) \\ Modem, dialing phone numbers \\ changing settings, how to described \\ how to \\ Mouse, how to use in dialog box \\ Movies}

When you click on one of the movie titles listed below, the movie will begin playing immediately. When it is finished, you can find more information and instructions on how to perform a task by clicking on the See also reference that follows the movie title.
Getting around Help, movie
(See also Help basics)
(See also Microsoft Works for Windows)
Welcome to Help, movie
(See also Help basics)
(See also Microsoft Works for Windows)
Working strategies, movie
(See also Help basics)
(See also Microsoft Works for Windows)

\section*{Moving \\ dialog boxes \\ keyboard method, how to \\ mouse method, how to windows, how to}

Moving around
\(\qquad\) preview, how to
scroll bars

\section*{Naming} charts
\(>\)
described
how to number of characters allowed documents in Works
\(\rangle\)
described
how to
number of characters allowed overview

\section*{New chart}
creating, how to
overview
Number fonts
\(\rightarrow\)
changing, how to overview
international settings
\(>\) changing, how to
overview
Numbering pages, how to change starting page


\section*{Page layout}
margins
orientation
```

changing, how to
described
overview
page size
changing, how to
described
Page number, how to change starting page

```
Page size
changing, how to
    described
    Parts of a document window
Pattern
\(>\)
described
changing, how to
Percentage breakdowns, charting (See Pie chart)
Phone numbers, dialing
canceling, how to
changing settings, how to
    described
how to
overview

Picas, as unit of measure
\(>\) changing, how to

Pie chart colors/patterns/markers



\section*{Quitting Microsoft Works for Windows}
described
P how to



\section*{Saving}

``` documents in Works
| described
```



```
overview
Scale
axis title
\(>\)
```



```
changing
described logarithmic
described
interval amount standard (linear)
described
interval amount
Scatter chart (See XY chart)
Scroll bar, illustrated
Scrolling
Series
category \((X)\) series (See Category \((X)\) series)
value ( \(Y\) ) series (See Value ( \(Y\) ) series)
```

Sharing information between Works tools
described
lesson: Sharing information

```
Showing
    status bar, how to
        Toolbar, how to
        Sizing a window by moving borders, how to
        Sound check
Spreadsheet
category labels and legends
category (X) series
    category labels, how to change
displaying affiliated charts
updating chart
value (Y) series
Spreadsheet tool, described
    Stacked bar chart
Stacked line chart
described
variations
Standard bar chart variations
    Standard line chart variations
    Standard pie chart
Standard scale
described
interval amount
    Standard stacked line chart
    Standard XY chart
Starting
    Microsoft Works for Windows
described
from MS-DOS, how to
    from Windows, how to
    last workspace arrangement displayed, described
        last workspace arrangement displayed, how to
        overview
        tutorial, how to
        Starting page, how to change
        Startup dialog box, how to use
Status bar
background reading
showing/hiding, how to
    Works window
Style, how to assign
\_Subtitle (See Title)
```

Telephone numbers, dialing
canceling, how to
changing settings, how to
described
how to use
Text aligning in header/footer, how to
Tiling windows
described
how to
background reading
overview
changing, how to
orinting in header/footers, how to
Title
adding
$\downarrow$
described
how to
overview
changing, how to

```
deleting
described
how to
fonts, how to assign
Title bar, illustrated
Toolbar
background reading
showing/hiding, how to
Works window
Tools
charting tool
database tool
lesson: Introducing the tools together
overview
    reporting tool
    sharing information between Works tools
    spreadsheet tool
    word processor tool
    Trends, charting (See Line chart)
Tutorial
described
lessons (See Lessons)
    overview
starting, how to
Typeface (See Font)
```


## Updating a chart

linked chart
spreadsheet changes

## Value ( Y ) series

 changing$t \quad$ described
how to
overview
creating from spreadsheet
deleting, how to
illustrated
legend
number allowed

## Vertical (Y) axis

 gridlinesadding/deleting, how to
described illustrated
right axis
adding, how to
deleting, how to
described
scale types
Volume check


```
Wedges in pie chart, illustrated
Window
arranging multiple
\(>\)
described saving arrangement, described
saving arrangement, how to
cascading
-
described
Window continued...
icon
arranging, how to
described
minimizing/restoring document window, how to
illustrated
lesson: Working with windows
moving
described
how to
Window continued
moving around within
parts
sizing by moving borders, how to
tiling
described
how to
Works window
Word processor tool copying a chart to
```


## described

how to
overview
described
Works window
Workspace
$\rangle \quad$ described
saving window arrangement, how to

> X axis (See Horizontal ( $X$ ) axis)
> $X=\frac{X \text {-series (See Category }(X) \text { series) }}{}$
> XY chart
> described
> variations
zooming page in preview, how to

