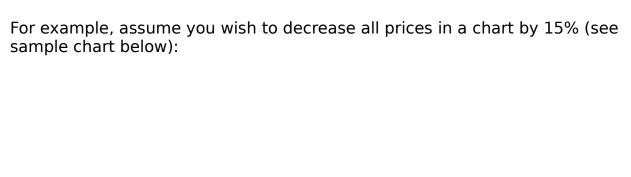# Using Math Grabber™

The Math Grabber XTension allows you to perform simple mathematical calculations on numerical text appearing anywhere in a QuarkXPress document. Like the other Grabber XTensions, Math Grabber uses the Marquee method of selection making it the ideal tool for working with tabular information (price charts, financial tables, etc).

For example, assume you wish to decrease all prices in a chart by 15% (see sample chart below):

o use Math Grabber, click on the Math Grabber tool and use it to drag a marquee around the page area containing the numbers you wish to change.

hen you release the mouse, the Math Grabber dialog will appear. At this point you must select the following items:

Operation: Use the Operation popup to specify which math operation you

wish to perform (addition, subtraction, multiplication, division). You can click on the popup menu to select an operation, or you can type the '+', '-', '*' or '/' keys to complete your selection.

After selection the operation, you must enter the value for the operation. For any operation you may specify an exact value or a percentage value.

For this example, select the minus character (or type the '-' key) and then enter 15% as the amount.

Precision: Math Grabber allows you to specify the number of decimal places of precision for each calculation. The four possible precision selections are described below:

Decimal: Specifies 1 decimal place of precision (e.g. $199.9)

2 Decimal: Specifies 2 decimal places of precision (e.g. $199.92)

Get From Text: This selection will automatically determine the correct precision by examining the numbers which appear in the selected page area.

None: No precision specified (e.g. $199)

For this example, select Get From Text for the precision.

Separator: This selection lets you select a Separator Set to use for the calculation. A separator set defines the characters which have been used to specify the thousands and decimal separator characters. The default is for U.S. currency (comma (,) for thousands and period (.) for decimal). By creating separator sets, you can define different separator characters for different currencies. This can be especially helpful when working with multiple currency values in the same document. Please see the Separator Setup section of this document for complete information on creating and modifying separator set information.

For this example, leave the separator selection at Default since we are working with U.S. currency values.

Applying The Change

After selecting your Operation, Precision and Separator, click OK. Math Grabber will scan through all text in the selected area, extract only the numerical data, perform the requested calculation, and replace the text with the new data.

For this example, the new chart should appear as below:

The last column of this price chart has been reduced by 15% using Math Grabber™)

Grabber™ Undo/Redo Feature

After making a change with Math Grabber, if you are not satisfied with the result, you can easily Undo (or Redo) your changes. To do so, use the Grabber™ menu (available under Quark's Edit menu).

he Grabber™ Undo/Redo option will only be available until a QuarkXPress box is made active. Note that you can also use the Grabber Undo/Redo keyboard equivalent (Cmd-Option-Z) to perform the same operation without the need to access the Edit menu.

Changing Multiple Areas with Math Grabber

It is likely that after you make changes to one area of a document, you may want to make identical changes to another area. In the previous example,

you might want to decrease prices for a number of other charts.

Math Grabber provides a very quick way to do this. To apply the previous calculation to a different page area, hold down the Command and Control keys as you drag out the Math Grabber marquee. You will notice that the cursor has changed to an arrow rather than the crosshairs while you are doing this.

When you release the mouse, Math Grabber will apply the previous calculation to the page area instantly!   Because it is not necessary to fill in any dialog entries, you can quickly change any number of areas in your document.

If you want to change the current Math Grabber calculation, simply drag out the marquee without holding down the Command and Control keys. The Math Grabber dialog will be presented as normal. Fill in the changes you want, click OK, and the new calculation will be stored and can now be applied to other areas of the document.

If you make a mistake, remember that the Undo/Redo capability of Math Grabber will apply to the last change which was made.

Separator Setup

As described in the earlier example, a Separator Set defines the characters which have been used to specify the thousands and decimal separator characters in the QuarkXPress document. The default setup is for U.S. currency which specifies a comma character (,) for thousands and a period character (.) for the decimal point. Lets say that you have mixed currency values in your publication such as U.S. and German pricing (see sample table below):

he German pricing uses a spaceband character for the thousands separator and a comma for the decimal separator. Math Grabber must be made aware of this when performing the requested calculation. To handle this situation, you must create a different separator set.

To create a new set (or to modify the Default set), click on the Separator Setup button (available in the Math Grabber main dialog or Preferences dialog). The Separator Setup dialog will be presented (shown below):

ach dialog element is described below:

Decimal: Use this popup menu to select the decimal separator character you wish to define for a set.

Thousands: Use this popup menu to select the thousands separator character you wish to define for a set.

Name: Use this popup menu to select from the list of currently defined sets. Once you have selected a set, it becomes the current set.

Delete: Use this button to delete the current set.

Update: Use this button to write the current values to the currently selected set (i.e. Update the current set).

Save As: Click this button to create a new set.

Creating a New Set

To create a new set, follow the steps outlined below:

1) Using the thousands and decimal popup menus, choose your new separator values. For this example, select Space as the thousands separator

and Comma as the decimal separator.

2) Click the Save As... button. You will be prompted to enter a name for the new set. For this example, enter German Pricing (or any name that you wish). Click OK when you are ready.

) You have now created a new Separator Set.

Using Separator Sets

Using the sets is straightforward. For this example, when you drag the marquee around the U.S. pricing, select the Default set. When you drag the marquee around the German pricing, select the German Pricing set. It's that easy.