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Specifying Custom Fit Equation

To specify custom fit function formula, press Add button and select Custom Equation in popup menu.

- Enter your formula in $y(x) =$ text field below. Use x as fit function argument. See [Expression Syntax](#) for details.
- You may recall last entered custom fit functions using Recently Used Custom item in Add popup menu.

The screenshot shows the MagicPlot software interface. On the left, a graph displays a blue data series labeled 'B-Baseline', a green curve labeled 'Curve 4', and a red dashed line labeled 'Fit Sum'. The x-axis has markers at 3 and 4. On the right, a dialog box titled 'Fit Curves' is open, showing a table of fit parameters and a formula editor.

...	Type	Legend	Show	Baseli...	Sum
...	Custom ...	Curve 4	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Below the table, there are checkboxes for 'Data' (checked), 'Sum' (checked), and 'Residual' (unchecked). There are also buttons for 'Add', 'Guess', and 'Fit by Sum'.

Parameter	Descripti...	Value	Lock	Std. Dev.
A		0.67	<input type="checkbox"/>	
omega		0.5993	<input type="checkbox"/>	
phi		0.4021	<input type="checkbox"/>	

The formula editor shows the equation: $y(x) = A \cdot \sin(\omega \cdot x + \phi) / x$.

At the bottom of the dialog, there are buttons for 'Join', 'Edit Interval', and 'Fit One Curve'.

Fit Parameters

You can introduce Fit Curve parameters with any names except argument x , and constants like e , π (see [predefined constants](#) for details):

- Parameters names are case-sensitive (a and A are different parameters).
- Parameters names lengths are not limited.
- Begin names with letter or $_$ sign. You can use numbers in the middle or in the end of the name: $a1$, a_1 , $A1$, $a1t$, but the names like $1a$ are not allowed.

The parameters you introduce in formula will automatically and immediately occur in parameters list, you do not need to enter parameters names in the list manually. Random values are used as the

initial values of parameters. Do not forget to set more relevant initial values, otherwise fit algorithm may fail.

Adjusting Parameters with Mouse Wheel

You can adjust Parameters in table using mouse wheel scrolling when mouse cursor is on the desired parameter: Hold Ctrl key (Cmd key on Mac) and scroll. If Shift key is also pressed the parameter step for one wheel 'click' will be increased.

See Also

- [Nonlinear Curve Fitting: Fit Plot](#)
- [Using Spline for Baseline Subtraction](#)
- [Predefined Fit Curves Equations](#)

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