

Física Experimental Básica: Tutorial MyCurveFit

Welcome to MyCurveFit
Easy-to-use online curve fitting.

Our basic service is FREE, with a FREE membership service and optional subscription packages for additional features. [More info...](#)

To get started:

- Enter or paste in your data
- Set axes titles
- Try different fit methods
- Use your fit for predictions

contact@mycurvefit.com

Fit Method

Export XLSX Share Predict

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Acesse em:

<https://mycurvefit.com/>

Linear Regression

Coeff.	Value	Error
m	1.78	0.366424
c	-1.5	1.21529

Measure	Value
R ²	0.887209
adjR ²	0.849612
IP	0.0166564
SE	1.15873
F	23.5978
AIC	17.1085
BIC	16.3274
DWS	2.62969
DofP	3
AAC	23.1085

Exo X	Exo Y
1	1
2	1.2
3	3
4	7
5	7

Modo de usar:

Clique em “Fit Method” para escolher qual tipo de regressão será feita.

The screenshot shows the MyCurveFit website interface. At the top, there is a navigation bar with the logo "MyCurveFit Online Curve Fitting [BETA]", a Twitter handle "@MyCurveFit", and buttons for "Join" and "Log in". The main content area features a graph with a 4PL curve fit. The graph has a Y-axis labeled "Y Axis Title" and an X-axis labeled "X Axis Title". Below the graph, there is a "Fit Method" dropdown menu, which is highlighted with a red box and a red arrow pointing to it. To the right of the graph, there is a "Welcome to MyCurveFit" message with a close button (X). The message text reads: "Easy-to-use online curve fitting. Our basic service is FREE, with a FREE membership service and optional subscription packages for additional features. [More info...](#) To get started:

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contact@mycurvefit.com". Below the graph, there are buttons for "Export XLSX" and "Share", and a "Predict" dropdown menu. At the bottom of the page, there is a footer with copyright information and links to "Terms of Service", "Privacy Policy", "About MyCurveFit", "Twitter", and "Facebook".

Y Axis Title

X Axis Title

4PL

$R^2: 0.9994$, $aR^2: 0.9972$, $P: 0.03549$, $SE: 0.1414$, $F: 446.2$, $AIC: 8$, $BIC: 6.438$, $DoF: 1$
 $a = 1.099995$, $b = 31.03071$, $c = 3.072862$, $d = 7.000825$
 $y = 7.000825 + (1.099995 - 7.000825) / (1 + (x/3.072862)^{31.03071})$

Fit Method

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Export XLSX Share Predict

X Axis Title Y Axis Title

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Modo de usar:

Caso queira fazer uma regressão linear selecione a opção “Straight line”.

The screenshot shows the MyCurveFit website interface. At the top, there is a browser window with the URL `mycurvefit.com`. The main content area features a graph with a grid. The Y-axis is labeled "Y Axis Title" and has tick marks at 0, 2, and 4. The X-axis is labeled "X Axis Title" and has tick marks at 1, 2, 3, and 4. Three red data points are plotted at approximately (1, 1), (2, 1), and (3, 3). A black curve is fitted to these points, showing a sharp increase after x=2. Below the graph, the fit statistics are displayed: $R^2: 0.9994$, $aR^2: 0.9972$, $P: 0.03549$, $SE: 0.1414$, $F: 446.2$, $AIC: 8$, $BIC: 6.438$, $DoF: 1$. The fit parameters are $a = 1.099995$, $b = 31.03071$, $c = 3.072862$, $d = 7.000825$. The fit equation is $y = 7.000825 + (1.099995 - 7.000825)/(1 + (x/3.072862)^{31.03071})$. A "Fit Method" dropdown menu is open, showing several options: "Linear" (selected), "Polynomial", "Nonlinear", "Cubic Spline", and "User Defined". The "Linear" option is further expanded to show "Linear Regression" (with the equation $y = mx + c$), "Point-to-Point", and "Straight line" (highlighted with a red arrow). The "Weighting" dropdown menu is also visible. On the right side of the interface, there is a dark grey sidebar with the text "Easy-to-use online curve fitting. Our basic service is FREE, with a FREE membership service and optional subscription packages for additional features. [More info...](#) To get started: Enter or paste in your data, Set axes titles, Try different fit methods, Use your fit for predictions. contact@mycurvefit.com

Modo de usar:

Insira os valores do eixo X na primeira coluna da tabela e os do eixo Y na segunda coluna.

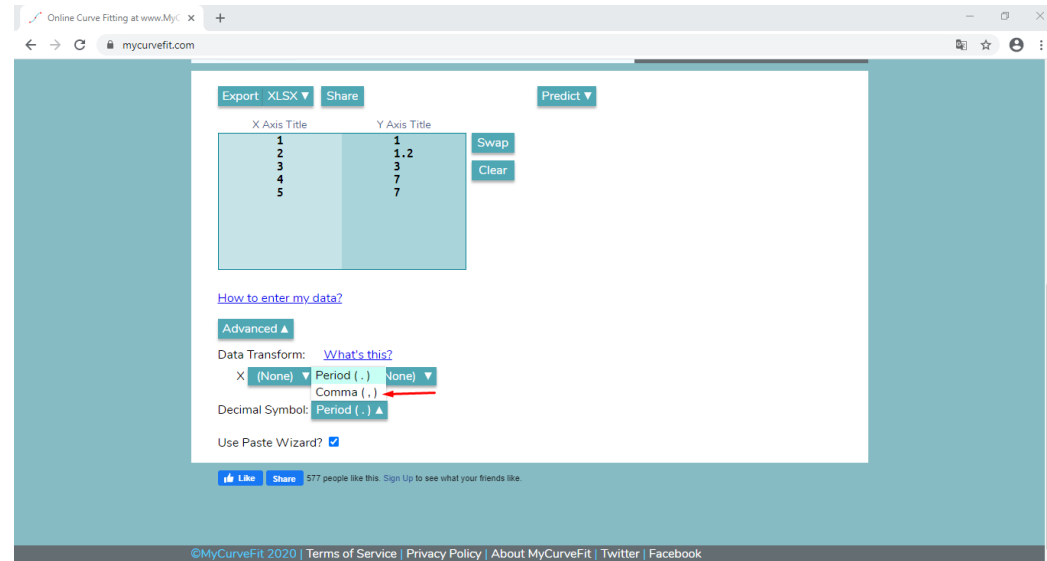
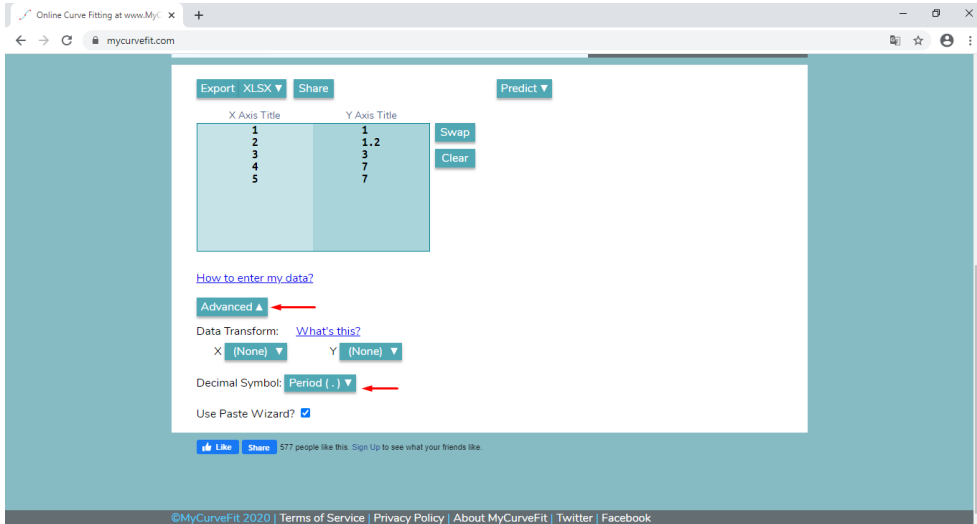
The screenshot shows the MyCurveFit website interface. At the top, there is a browser window with the URL mycurvefit.com. The main content area features a graph with a fitted curve and a table for data entry. The table has two columns: 'X Axis Title' and 'Y Axis Title'. The data entered in the table is as follows:

X Axis Title	Y Axis Title
1	1
2	1.2
3	3
4	7
5	7

Below the table, there are buttons for 'Swap' and 'Clear'. The fit results are displayed above the table, including the fit method (4PL), R-squared value (0.9994), and the fitted equation: $y = 7.000825 + (1.099995 - 7.000825)/(1 + (x/3.072862)^{31.03071})$. The website footer contains copyright information and social media links.

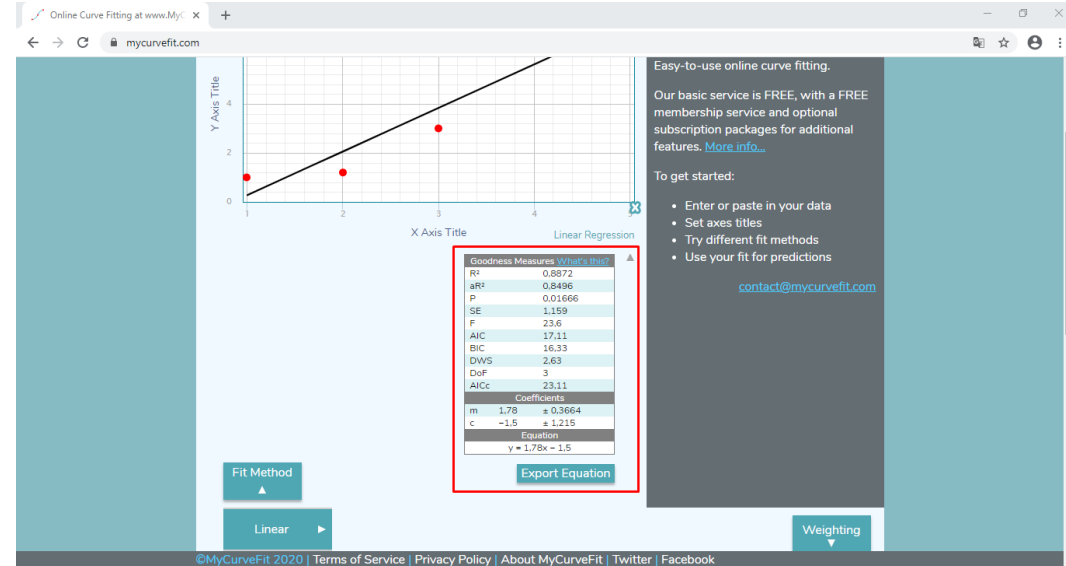
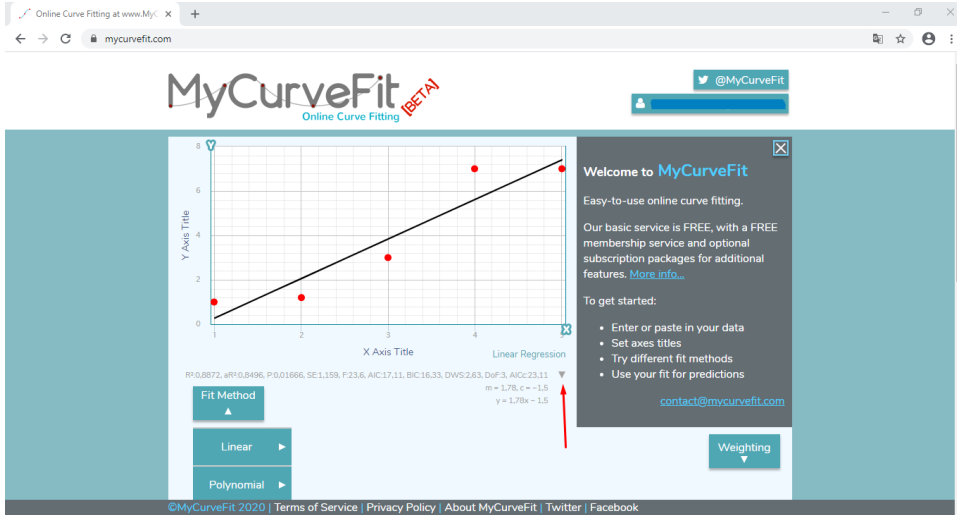
Modo de usar:

Caso deseje que o símbolo de decimal seja vírgula ao invés de ponto, clique em “Advanced” e depois em “Period (.)” e selecione a opção “Comma (,)”, como mostrado nas imagens abaixo.



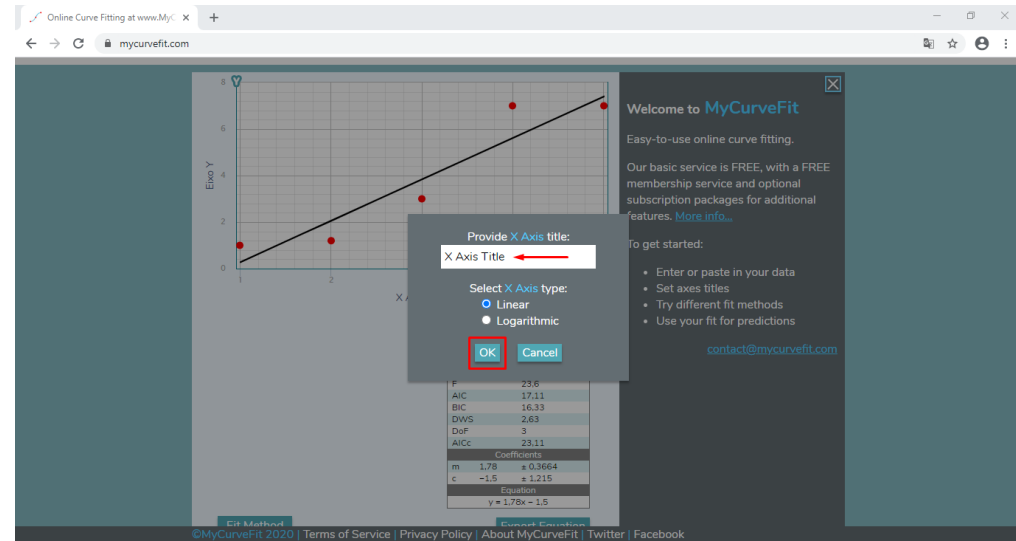
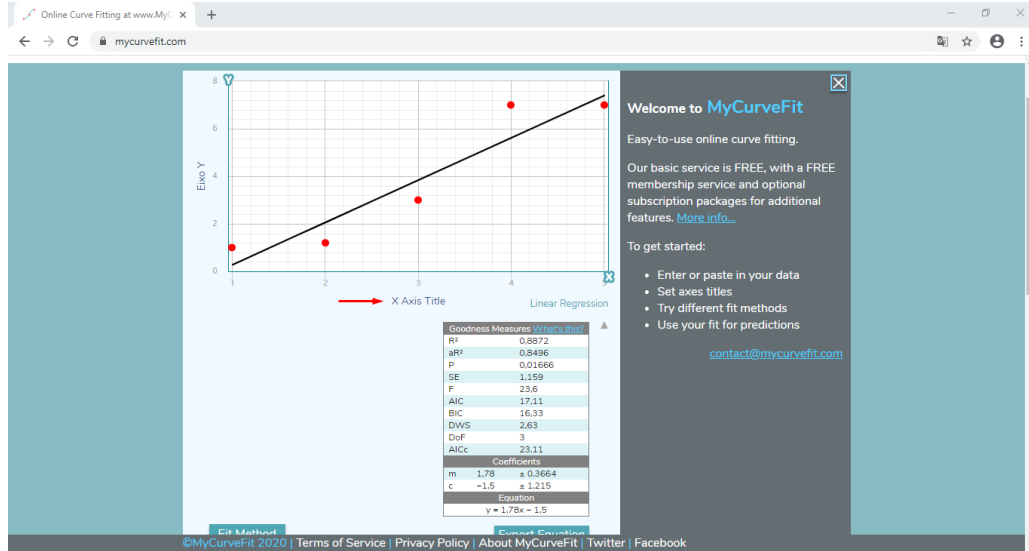
Modo de usar:

Clique na seta mostrada pela figura da esquerda para aparecer os resultados obtidos pela regressão.



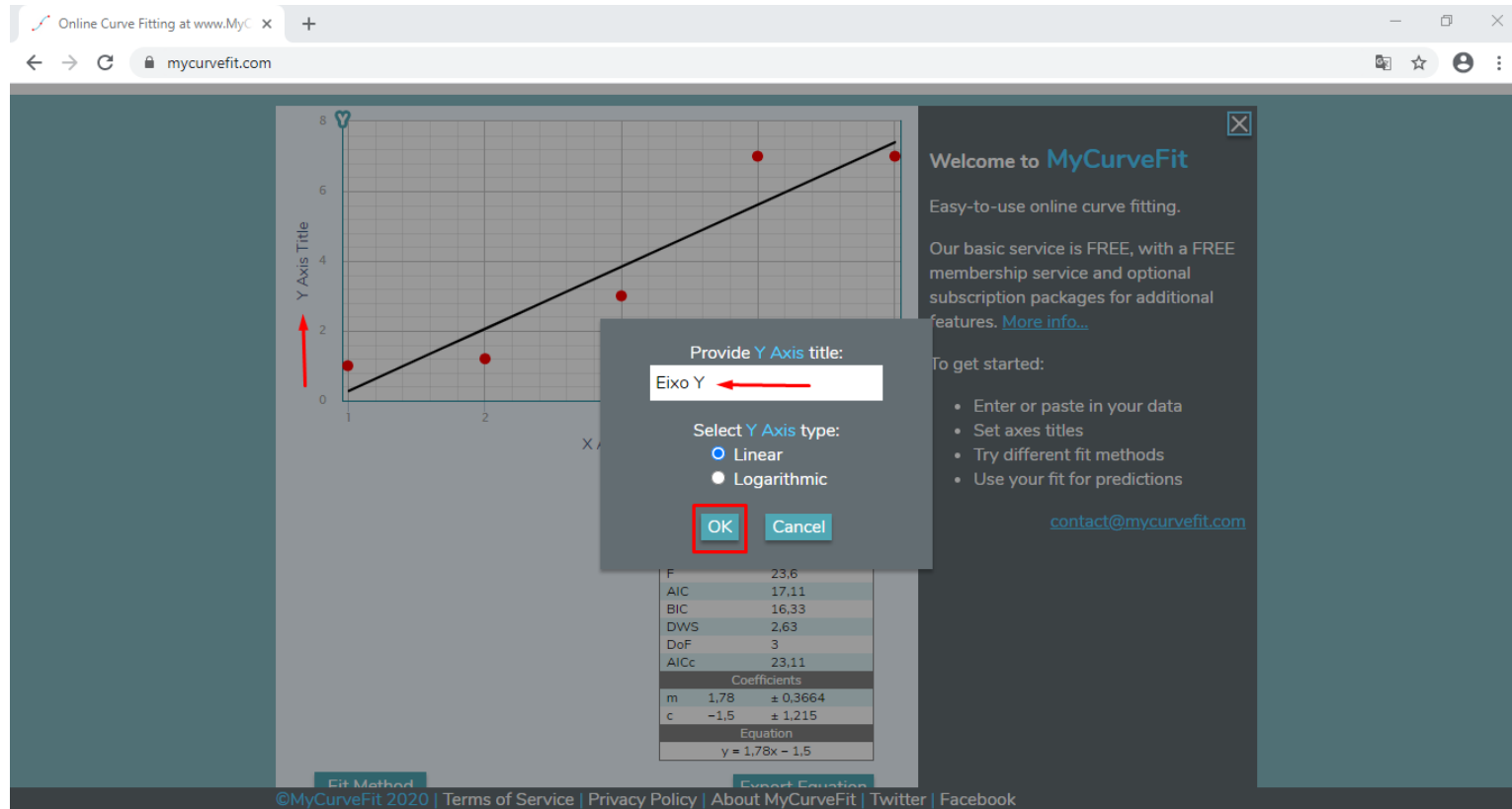
Modo de usar:

Para alterar o nome dos eixos coordenados clique neles, digite o nome desejado e clique em “OK”, conforme mostrado nas imagens.



Modo de usar:

Mudando o nome do eixo y:



The screenshot shows the MyCurveFit website interface. A dialog box is open in the center, titled "Provide Y Axis title:". The input field contains the text "Eixo Y", with a red arrow pointing to it. Below the input field, there are radio buttons for "Linear" (selected) and "Logarithmic". At the bottom of the dialog are "OK" and "Cancel" buttons. The "OK" button is highlighted with a red box. In the background, a graph shows a linear fit to five data points. The Y-axis is labeled "Y Axis Title" and has a red arrow pointing to it. The X-axis is labeled "X Axis Title". To the right of the graph, there is a welcome message and a list of instructions for getting started. At the bottom of the page, there is a footer with copyright information and links to terms of service, privacy policy, and social media.

Online Curve Fitting at www.MyCurveFit.com

mycurvefit.com

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Fit Method: Linear

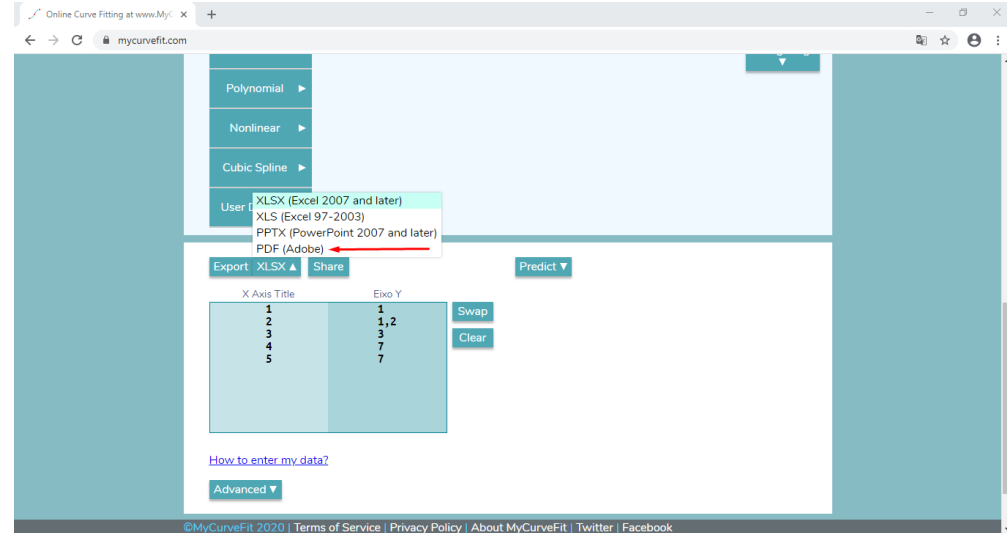
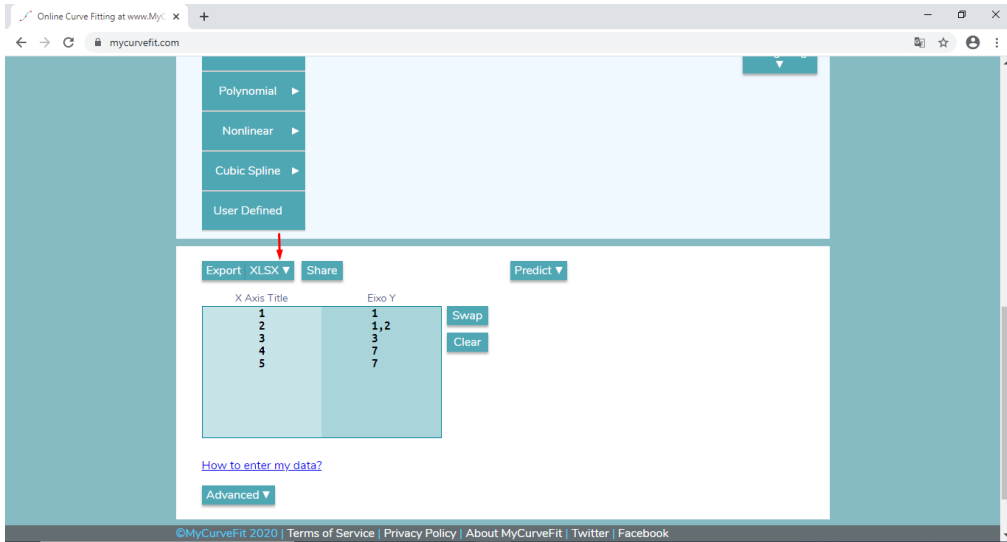
Equation: $y = 1,78x - 1,5$

F	23,6
AIC	17,11
BIC	16,33
DWS	2,63
DoF	3
AICc	23,11
Coefficients	
m	1,78 ± 0,3664
c	-1,5 ± 1,215
Equation	
$y = 1,78x - 1,5$	

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Modo de usar:

Para salvar o gráfico, a tabela e os dados da regressão clique na opção “XLSX” e selecione “PDF”.



Modo de usar:

Em seguida clique em “Export”.

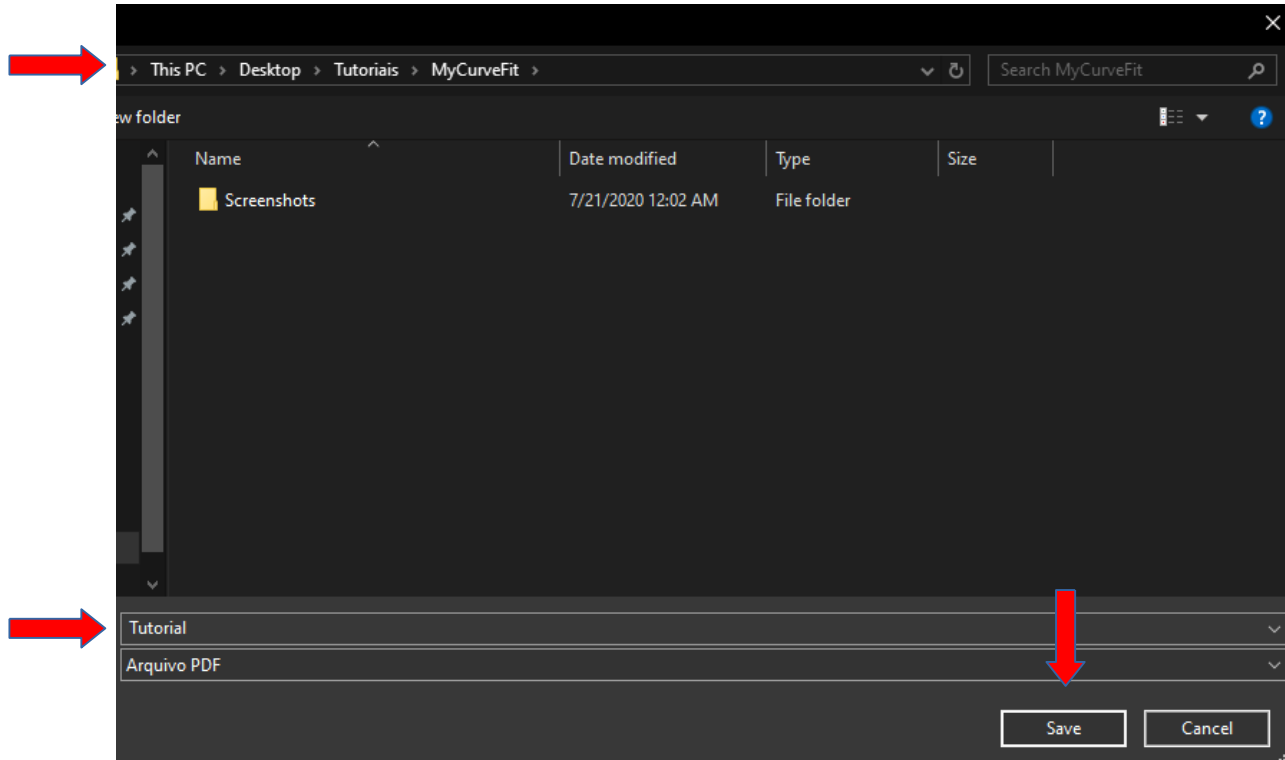
The screenshot shows the MyCurveFit website interface. At the top, there is a navigation bar with the text "Online Curve Fitting at www.MyC" and a plus sign. Below this is a browser address bar showing "mycurvefit.com". The main content area is divided into two columns. The left column contains four menu items: "Polynomial", "Nonlinear", "Cubic Spline", and "User Defined", each with a right-pointing arrow. The right column is mostly empty. Below the menu items, there is a row of buttons: "Export", "PDF" (with a dropdown arrow), "Share", and "Predict" (with a dropdown arrow). A red arrow points to the "Export" button. Below the buttons is a table with two columns: "X Axis Title" and "Eixo Y". The table contains the following data:

X Axis Title	Eixo Y
1	1
2	1,2
3	3
4	7
5	7

To the right of the table are two buttons: "Swap" and "Clear". Below the table is a link: [How to enter my data?](#). At the bottom of the main content area is a button: "Advanced" (with a dropdown arrow). The footer contains the text: "©MyCurveFit 2020 | Terms of Service | Privacy Policy | About MyCurveFit | Twitter | Facebook".

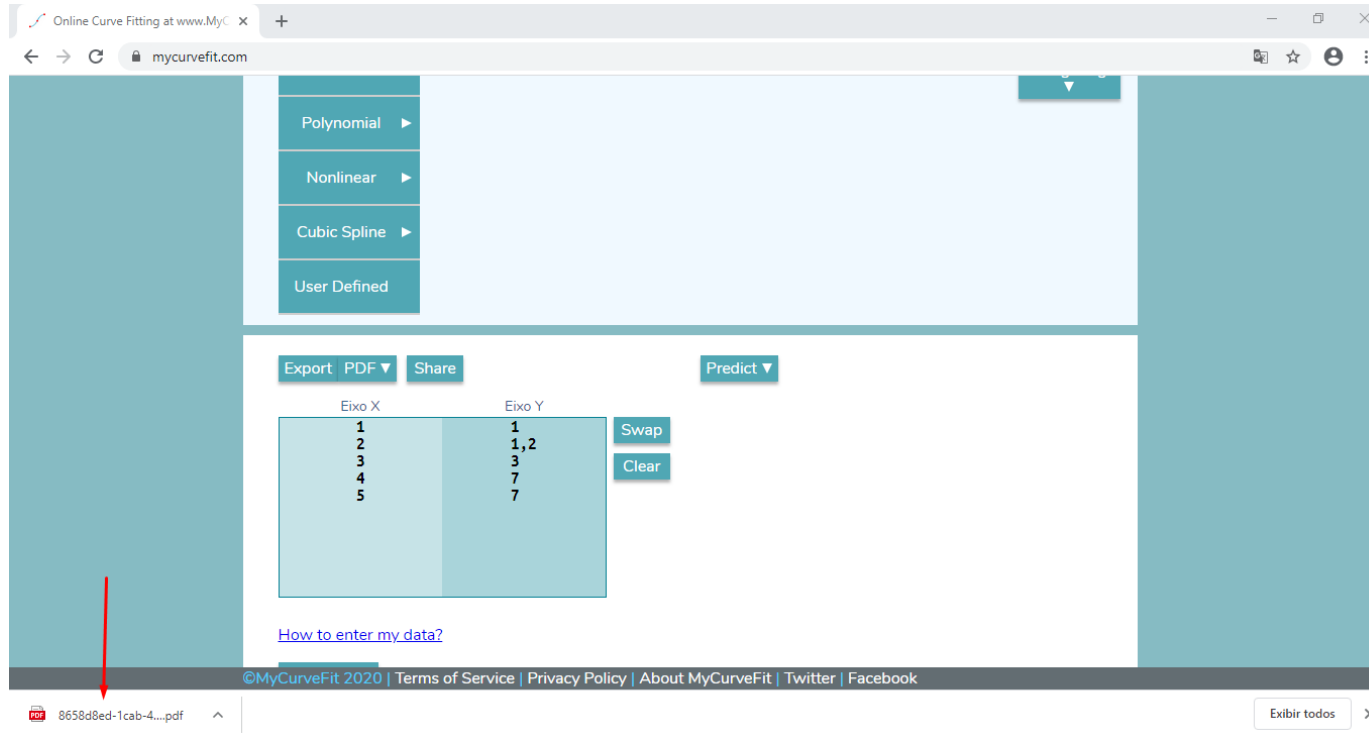
Modo de usar:

Escolha o local onde salvará o arquivo, seu nome e clique em “Save”.



Modo de usar:

Abra o arquivo indo até o local onde ele foi salvo ou clicando nele como mostrado abaixo.



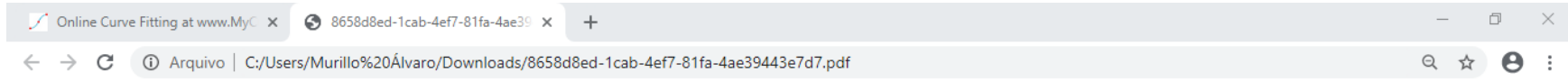
The screenshot shows the 'Online Curve Fitting' web application. The browser address bar displays 'mycurvefit.com'. On the left sidebar, there are four menu items: 'Polynomial', 'Nonlinear', 'Cubic Spline', and 'User Defined'. Below the sidebar, there are buttons for 'Export PDF', 'Share', and 'Predict'. A data entry table is visible with two columns: 'Eixo X' and 'Eixo Y'. The table contains the following data:

Eixo X	Eixo Y
1	1
2	1,2
3	3
4	7
5	7

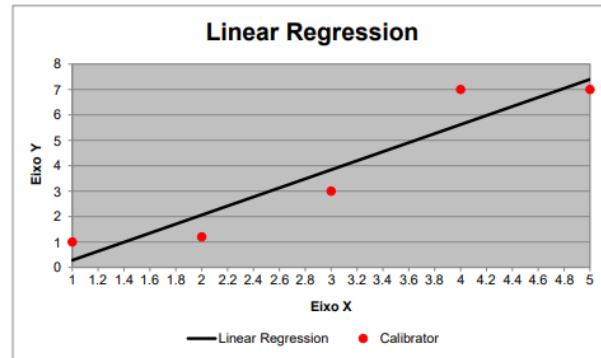
Below the table, there are 'Swap' and 'Clear' buttons. A red arrow points to a PDF file icon in the bottom left corner of the browser window, labeled '8658d8ed-1cab-4...pdf'. At the bottom of the page, there is a footer with the text: '@MyCurveFit 2020 | Terms of Service | Privacy Policy | About MyCurveFit | Twitter | Facebook'. A small 'Exibir todos' button is located in the bottom right corner of the browser window.

Modo de usar:

Esse é o PDF com o gráfico, a tabela de dados e os valores da regressão com suas respectivas incertezas.



MyCurveFit
Online Curve Fitting



Valores da regressão linear usando $y=mx+c$

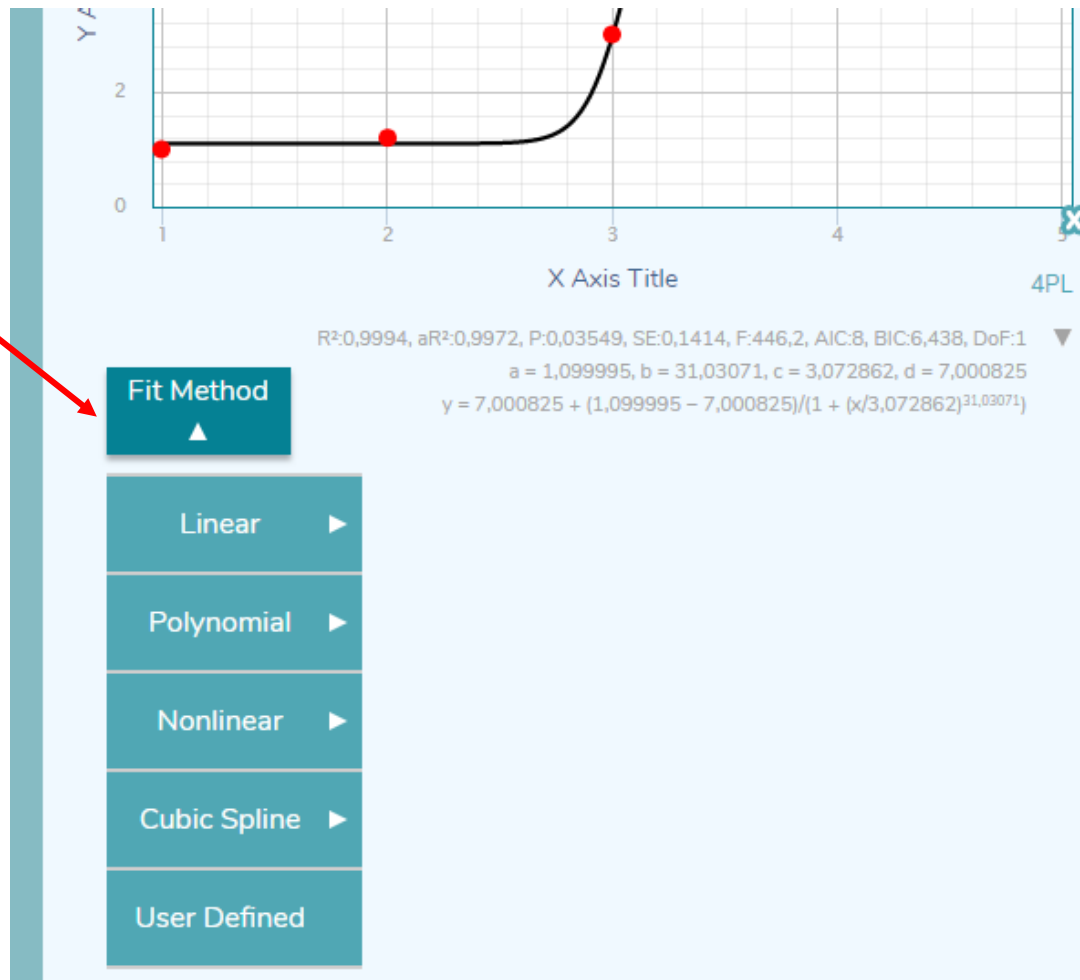
Coeff.	Value	± Error
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c	-1.5	1.21529

Measure	Value
R ²	0.887209
aR ²	0.849612
P	0.0166564
SE	1.15873
F	23.5978
AIC	17.1085
BIC	16.3274
DWS	2.62999
DoF	3
AICc	23.1085

Eixo X	Eixo Y
1	1
2	1.2
3	3
4	7
5	7

Modo de usar:

Para ajustes não lineares clique em “Fit Method” e selecione aquele desejado

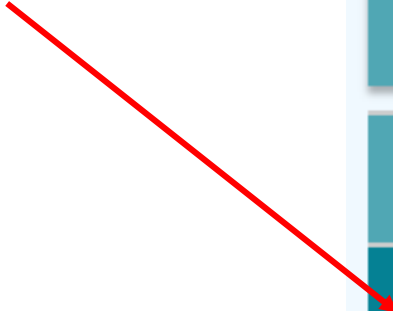


Modo de usar:

Para ajustes não lineares clique em “Fit Method” e selecione aquele desejado

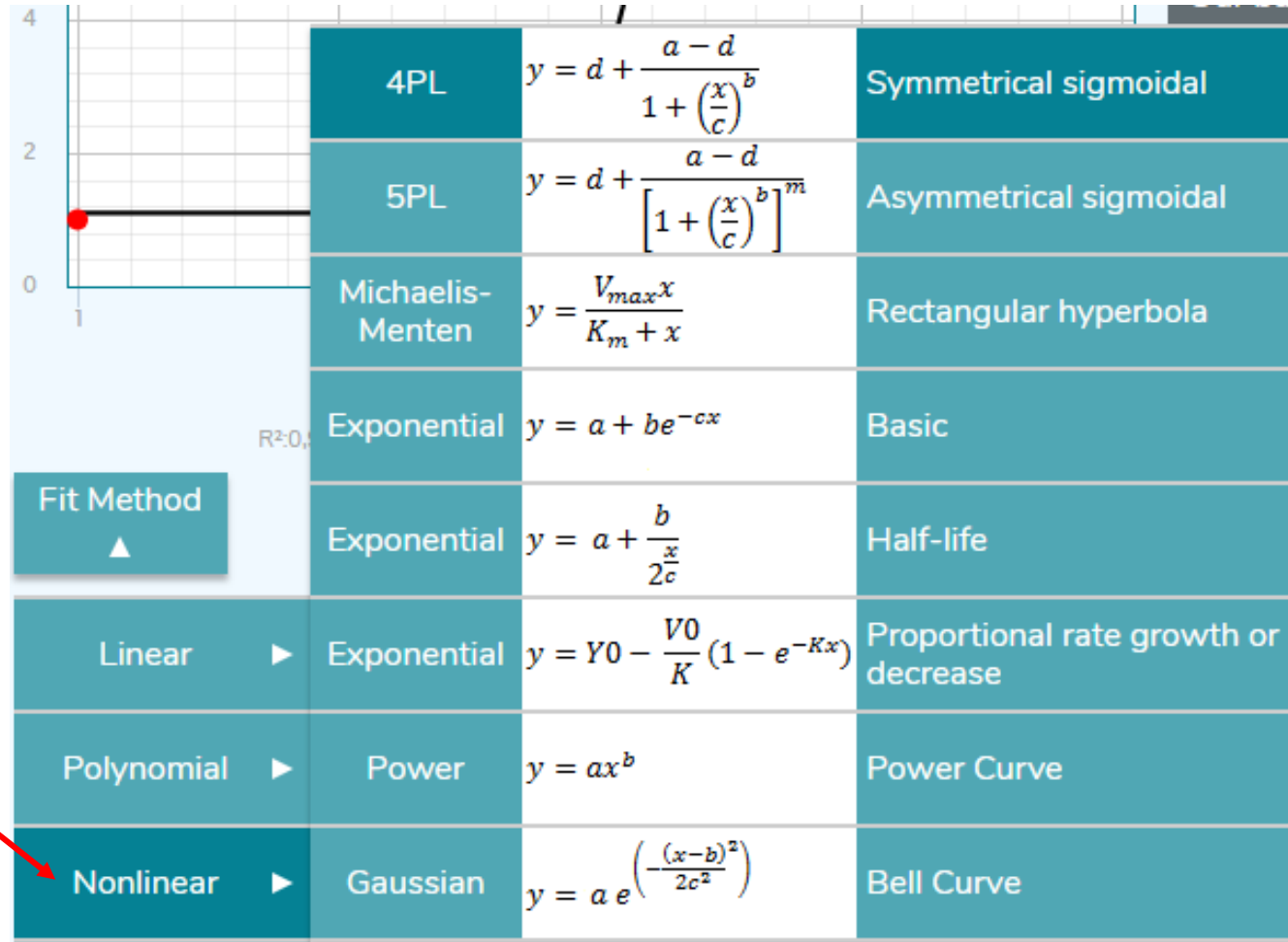
$a = 1,099995, b = 31,03071, c = 3,072862, d = 7,000825$
 $y = 7,000825 + (1,099995 - 7,000825)/(1 + (x/3,072862)^{31,03071})$

Fit Method ▲			
Linear ▶			
Polynomial ▶	Quadratic Regression	$y = a + bx + cx^2$	2nd order polynomial
Nonlinear ▶	Cubic Regression	$y = a + bx + cx^2 + dx^3$	3rd order polynomial
Cubic Spline ▶	Quartic Regression	$y = a + bx + cx^2 + dx^3 + ex^4$	4rd order polynomial
User Defined	Quintic Regression	$y = a + bx + cx^2 + dx^3 + ex^4 + fx^5$	5th order polynomial



Modo de usar:

Para ajustes não lineares clique em “Fit Method” e selecione aquele desejado



The image shows a software interface for data fitting. On the left, a graph displays a horizontal line at y ≈ 1.0 with a red dot at (1, 1.0). The y-axis ranges from 0 to 4, and the x-axis has a tick at 1. Below the graph is a dropdown menu labeled "Fit Method" with an upward-pointing triangle. The dropdown menu is open, showing a list of fit methods. A red arrow points to the "Nonlinear" option. The list of methods includes:

4PL	$y = d + \frac{a - d}{1 + \left(\frac{x}{c}\right)^b}$	Symmetrical sigmoidal	
5PL	$y = d + \frac{a - d}{\left[1 + \left(\frac{x}{c}\right)^b\right]^m}$	Asymmetrical sigmoidal	
Michaelis-Menten	$y = \frac{V_{max}x}{K_m + x}$	Rectangular hyperbola	
Exponential	$y = a + be^{-cx}$	Basic	
Exponential	$y = a + \frac{b}{2c}$	Half-life	
Linear	Exponential	$y = Y_0 - \frac{V_0}{K} (1 - e^{-Kx})$	Proportional rate growth or decrease
Polynomial	Power	$y = ax^b$	Power Curve
Nonlinear	Gaussian	$y = a e^{-\left(\frac{(x-b)^2}{2c^2}\right)}$	Bell Curve