
Pseudo-code for taking the numerical derivative of tabular data using the trapezoid method:

1. Create a list or add a column to the table to store the derivative.
2. Check that the data is evenly spaced and calculate the spacing h .
3. Calculate the area A with vector calculations where y refers to the y -vector of data:

$$A = \frac{h}{2} (y(1) + y(\text{end}) + 2 (y(2 : \text{end} - 1))) .$$