

**ZMATH 2015d.00948**

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**A Richardson's extrapolation spreadsheet calculator for numerical differentiation.**

Spreadsheets Educ. 6, No. 2, 5 p., electronic only (2013).

Summary: Even though approximating the definite differentiation by Richardson's extrapolation method is straight forward, but its repetitive calculations are quite boring. Hence, there is a need to develop a suitable tool in teaching and learning for this method. Here, we developed a Richardson's extrapolation Excel spreadsheet calculator to approximate the numerical differentiation that can be used by students and educators who need its full solution. With an appropriate function entered by users using 3-point central formula and a starting step size  $h$  full solution of Richardson's extrapolation table up to level 4 can be obtained quickly and easily. In this spreadsheet calculator, users can extend the level to any desired level by themselves.

*Classification:* N40 N50 U70

*Keywords:* numerical analysis; numerical differentiation; Richardson's extrapolation; spreadsheets; approximation; derivatives

<http://epublications.bond.edu.au/ejsie/vol6/iss2/5/>