Analisi di convergenza e stima dell'ordine e dell'errore di una formula alle differenze finite

Funzione .... Formula .... x ....

$\Delta x =$ .... $V_n^r =$ ....

$\Delta x/2 =$ .... $V_n^m =$ ....

$\Delta x/4 =$ .... $V_n^f =$ ....

$$\tilde{n} = \frac{log\frac{V_n^r - V_n^m}{V_n^m - V_n^f}}{log2} = \text{......................}$$

$$\tilde{k} = -\frac{V_n^r - V_n^m}{\Delta x^{\tilde{n}} - (\frac{\Delta x}{2})^{\tilde{n}}} = \text{................}$$

$$\tilde{V} = V_n^r + \tilde{k}(\Delta x)^{\tilde{n}} = \text{......................}$$

$$\tilde{\varepsilon}_n(\Delta x) = \left|\tilde{V} - V_n^r\right| = \text{....................}$$

$$\tilde{\varepsilon}_n(\Delta x/2) = \left|\tilde{V} - V_n^m\right| = \text{................}$$

$$\tilde{\varepsilon}_n(\Delta x/4) = \left|\tilde{V} - V_n^f\right| = \text{................}$$

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