

Interpolation Prior Knowledge



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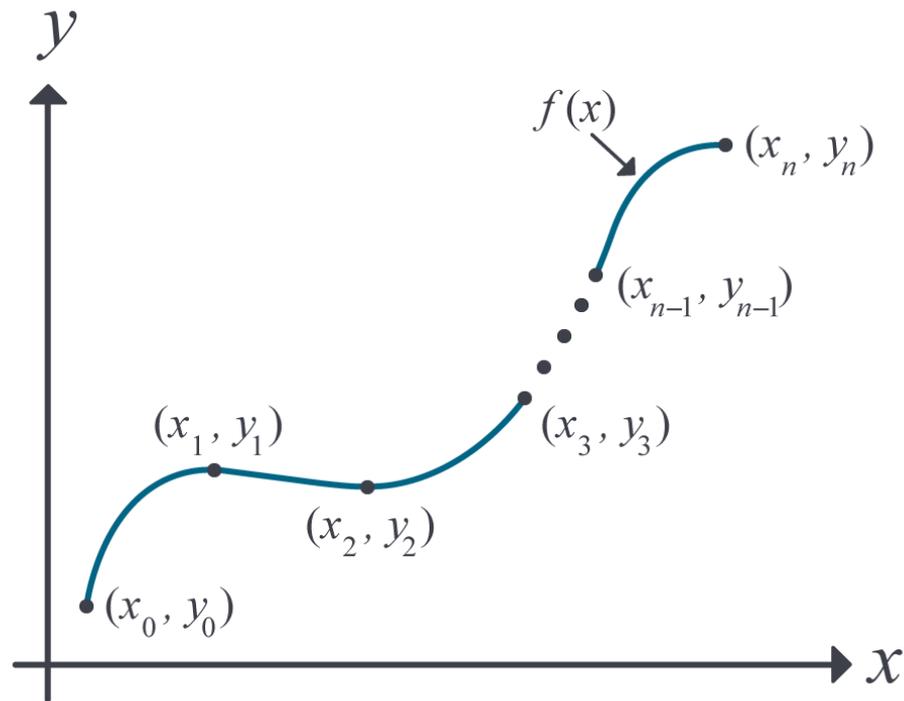
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- Go to <http://nm.MathForCollege.com>
- Click on Prerequisites to Interpolation



What is interpolation?

Given $n + 1$ data points $(x_0, y_0), (x_1, y_1), (x_2, y_2), \dots, (x_n, y_n)$, interpolate the data to a function $f(x)$



Example of interpolation

The specific heat of air at constant volume is given for air

Temperature, T K	Specific heat, c_v kJ/kg-K
700	1.364
800	1.354
900	1.344
1000	1.336

Estimate the specific heat at constant volume at a temperature of 960K using a straight-line interpolation.



Temperature, T K	Specific heat, c_v kJ/kg-K
700	1.364
800	1.354
900	1.344
1000	1.336



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