Solving linear recurrence relations

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- Linear homogeneous recurrence relations with constant coefficients
- Solving linear homogeneous recurrence relations with constant coefficients
- Solving linear homogeneous recurrence relations with constant coefficients of degree two and of degree three
- Linear nonhomogeneous recurrence relations with constant coefficients
- Generating functions
- Using generating functions to solve recurrence relations

Linear homogeneous recurrence relations with constant coefficients

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As we will see, these characteristic roots can be used to give an explicit formula for all the solutions of the recurrence relation.

Solving linear homogeneous recurrence relations with constant coefficients of **degree two**

Proof of theorem 1

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Solving linear homogeneous recurrence relations with constant coefficients of **degree two**

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Proof of theorem 4

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Generating functions

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Using generating functions to solve recurrence relations

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