

Fibonacci Numbers and Binet's Formula

Short Roadmap

■ The generalized Fibonacci equation

- 0. A remark on the historical development
- 1. Generalisation
- 2. Applying standard methodology: Introducing new parameters (in this case: a "tuning" parameter)
- 3. The tuning process
- 4. The characteristic polynomial
- 5. Solutions - by applying the results on geometric series
- 6. Vieta's formulae
- 7. Results
- 8. Obtaining more solutions
- 9. Initial values
- 10. Applying the results to the sequence of the standard Fibonacci numbers - Binet's formula
- 11. Binet's Formula
- 12. Check