

Higher order homogeneous linear DEs with constant coefficients

Tackling higher order homogeneous linear differential equations with constant coefficients, follows the same method as for the 2nd-order case. The problem, however, becomes the additional complexity of finding the roots of the higher degree polynomials that result.

Discussion, comments, and examples:



Math45-Module-12-Video-05

WeBWork module 12 exercises:

- Problems 7

References:

- [Finding roots of polynomials](https://en.wikipedia.org/wiki/Root-finding_algorithms#Roots_of_polynomials)  [_ \(https://en.wikipedia.org/wiki/Root-finding_algorithms#Roots_of_polynomials\)](https://en.wikipedia.org/wiki/Root-finding_algorithms#Roots_of_polynomials)
- [Wolfram alpha](https://www.wolframalpha.com/)  [_ \(https://www.wolframalpha.com/\)](https://www.wolframalpha.com/)