## Techniques for solving 2<sup>nd</sup> or higher order linear ODEs

Technique

Used to find solutions of homogeneous or non-homogeneous DEs (or both)? (If non-homogeneous, any constraints on forcing term?) Used to find solutions of constant or variable coefficients DEs (or both)? (If variable coefficients, any constraints on coefficients?)

What information must you know before using the method?

Superposition

4.1

Reduction of Order 4.2

Characteristic Polynomial 4.3

Undetermined Coefficients 4.4

Variation of Parameters 4.6

Indicial Equation 4.7