

Techniques for solving 2nd 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	non-homogeneous forcing term must be linear combination of forcing terms with known solutions for DE	both constant & variable coefficients	solutions for homogeneous DE and non-homogeneous DE with simpler forcing terms
Reduction of Order 4.2			
Characteristic Polynomial 4.3	homogeneous	constant coefficients	N/A
Undetermined Coefficients 4.4			
Variation of Parameters 4.6			
Indicial Equation 4.7			