LECTURE SUMMARY 10.1

WEDNESDAY, JULY 13, 2016

Higher-Order Linear Nonhomogeneous Differential Equations with Constant Coefficients

$$a_n y^{(n)} + a_{n-1} y^{(n-1)} + ... + a_1 y' + a_0 y = q(x)$$

1. Relationship between solutions of nonhomogeneous differential equations and solutions of the associated homogeneous equations.
2. The method of undetermined coefficients to find particular solutions of nonhomogeneous differential equations.
3. Table of particular solutions based on types of $q(x)$.
4. Examples.

Suggestion: Do exercises as many as possible.