

Review 2 Math 361

Any term in **bold face** know the definition well enough to state it on the test. The definition you give should be very similar to the one in the book or one with similar detail.

Section 4.1/4.2 **linearly independent, Wronskian, fundamental set of solutions** be able to use reduction of order

Sample problems 4.1- 15,23 4.2-4

Section 4.3 **auxiliary equation for second order linear with constant coefficients , Euler's formula** be able to derive auxiliary equation pg 133 be able to do all three cases and be able to convert case III from complex to sin and cos 134

Sample problems 6, 33, Example 2,

Section 4.4 method of undetermined coefficients

Sample problems 21, Example 2

Section 4.5 Know the general forms of the 3 different Annihilator operators

Sample problems 55,65, example 6

Section 4.6 Variation of parameters

Sample problems 11, example 1

Section 4.7 **auxiliary equation for second order Cauchy-Euler** be able to derive auxiliary equation pg 163 3 cases of roots be able to convert case III from complex to sin and cos pg 165

Sample problems 11, 27, Example 5

Section 4.8.1 **Green's function**

Sample problems 13, Example 5

Section 7.1 **Laplace transform, exponential order** Know and be able to derive Theorem 7.1.1

Sample problems 11,25,27, Example 2,3,4

Section 7.2 Know Theorem 7.2.1, Be able to derive (6), (7) page 284

Sample problems 12,19, 33 Example 5