

Math 211, Differential Equations and Linear Algebra Assignment 12.
To be turned in by Tuesday, November 24 at 9PM, either during
class to to office 45 in the basement of Herman Brown.

Part 1

Section 5.5: 1, 13, 19.
solve the IVP

$$y'' + y = (t - 1)^2 H_{0,1}(t) - (t - 1)^2 H_{1,2}(t),$$
$$y(0)=y'(0)=0$$

5.6 1, 3 5.7 3, 27

guidelines for exam rewrites:

If you wish to rewrite problem one, include part C. When I grade rewrites I will grade 2, 3, and 4 and get a weighted average to compare with your old score.

I insist that every exam rewrite include problems five and six. The reason is that most people used variation of parameters. Do it by the method of undetermined coefficients. It will be much faster. The reason I insist is that I graded this one with a particularly expressed mindset that proof of familiarity is the chief aim.

I will allow one problem indicated by you in advance to be regraded for full credit.

If you care about this I will total the score on problems 2, 3, 4 by simply averaging and taking this number out of twenty. If anyone wants one of them to be regraded for full credit I will achieve this by a weighted average and then getting the new score by means of a weighted average between your old total on the two you did and the new result.