

HW 13

For each of the following equations, which of the following methods (as done in this course) cannot be applied and why not? (a) Method of undetermined coefficients, (b) Variation of parameters, (c) Laplace transform, (d) Series solution.

1) $y'' + y = \ln t; \quad y(0) = 0, y'(0) = 1.$

2) $y'' + xy = 0.$

Note that if a method can be applied, you do not have to say why nor do you have to carry out the solution. Your answer could look something like:

1) (a) because..., etc.