

1125-P5-2752 **Paul D. Olson*** (pdo2@psu.edu). ” *Laplace Transforms or the Method of Undetermined Coefficients : which should be introduced first ?* ”. Preliminary report.

When we teach how to solve linear , second order ODE’s with constant coefficients , we have several choices . The Method of Undetermined Coefficients and the Method of Variation of Parameters are possible . We could also employ the use of Laplace Transforms . When working on an Initial Value problem , the Method of Undetermined Coefficients can be labor intensive in determining a particular solution . Laplace transforms use the initial conditions right away in solving the equation . But the building of the machinery of Laplace Transforms takes more time to develop . We shall consider the benefits and drawbacks of each approach . (Received September 20, 2016)