MAT 239 (Differential Equations), Prof. Swift
Worksheet 19, on the Method of Undetermined Coefficients

1. Find the general solution $y(t)$ to $(D-2)^2 y = 0$.

2. Find the general solution $y(t)$ to $(D-1)(D^2+4)y = 0$.

3. Find the form of the particular solution to $(D-2)^2 y = 5e^t + 3\sin(2t)$.

4. Find the general solution $y(t)$ to $(D^2+4)y = 0$.

5. Find the form of the particular solution to $(D^2+4)y = 7e^t - \cos(2t)$.