1. Review Chapters 3.4, 3.5 and 3.6. In particular, go through reduction of order in Chapter 3.4 and study Table 3.5.1.

2. Do the following questions from the textbook

   **Chapter 3.4** #34, 36  
   **Chapter 3.5** #8, 11, 35, 37  
   **Chapter 3.6** #13, 17

3. For the following inhomogeneous differential equations, indicate the form of the particular solution with undetermined coefficients. For example, for the equation,

   \[ y'' + 2y' + y = te^{-t}, \]

   the form of the particular solution is \( y_p(t) = t^2(A_1 t + A_0)e^{-t}. \)

   (a) \( y'' - 8y' + 17y = t \cos(t) + t \)
   (b) \( y'' - 8y' + 17y = te^{4t} + t \)
   (c) \( y'' - 8y' + 17y = t^2e^{4t} \cos(t) - e^{2t} \sin(t) \)