Math 2080: Differential Equations Worksheet 3.3: The method of undetermined coefficients

NAME:

Find the general solution to the following 2nd order differential equations.

1.
$$y'' + 2y' - 3y = 0$$

2.
$$y'' + 2y' - 3y = e^{3t}$$

$$3. \ y'' + 2y' - 3y = 2t^2$$

4.
$$y'' + 2y' - 3y = 5\sin 3t$$

5.
$$y'' + 2y' - 3y = e^{2t}$$