Name: _____ **Sort #:** _____

Worksheet 11: Variation of Parameters

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1. (20 pts) Find the general solution of the differential equation

$$y'' + y = \tan(t), \quad 0 < t < \frac{\pi}{2}$$

2. (20 pts) Find the general solution of the differential equation

$$y'' + 4y' + 4y = t^{-2}e^{-2t}, \quad t > 0$$