

Name: \_\_\_\_\_

Score: \_\_\_\_\_

1. Solve the differential equations. (3 points each)

(a)  $y'' - y = \sin x$

(b)  $y'' - 3y' = e^{3x} - 12$

2. Solve the initial value problem  $y'' - 2y' + y = 2e^x, y(0) = 1, y'(0) = 0$ . (4 points)