

Problem 32

In each of Problems 29 through 32, use the method outlined in Problem 28 to solve the given differential equation.

$$(1 - t)y'' + ty' - y = 2(t - 1)^2e^{-t}, \quad 0 < t < 1; \quad y_1(t) = e^t \quad (\text{see Problem 16})$$