

Problem 28

In each of Problems 27 and 28, use the method of reduction of order (Problem 26) to solve the given differential equation.

$$t^2(t+3)y''' - 3t(t+2)y'' + 6(1+t)y' - 6y = 0, \quad t > 0; \quad y_1(t) = t^2, \quad y_2(t) = t^3$$