

**Problem 35**

If the differential equation  $t^2y'' - 2y' + (3 + t)y = 0$  has  $y_1$  and  $y_2$  as a fundamental set of solutions and if  $W(y_1, y_2)(2) = 3$ , find the value of  $W(y_1, y_2)(4)$ .