DEN Homework # 6

Solve the problems and then bring your work to the lab in the seventh week of school.

1. Find the solution of the equation $y'' - 5y' + 6y = e^{3x} + 12x - 4$ that satisfies the initial conditions $y(0) = 2$, $y'(0) = 5$.

2. Find the solution of the equation $y''' + 9y' = 8\cos(x) - 9$ that satisfies the initial conditions $y(0) = 13$, $y'(0) = 0$, $y''(0) = 0$.