7. [15 points] For each of the following find explicit, real-valued solutions as indicated. For this problem, **do** use Laplace transforms.

    a. [8 points] Solve $y'' + 2y' + 10y = 5$, $y(0) = 1$, $y'(0) = 2$.

    b. [7 points] Find the solution to $y'' + 5y' + 6y = e^{-3t}$, $y(0) = y'(0) = 0$.