HOMEWORK 7

• Section 4.6 in the book: Exercises 8, 12, 14.

Problem 1. Find the general solution to the equation
$$4x'' - 4x' + x = e^{t/2}\sqrt{1 - t^2}.$$

Problem 2. Use the method of undetermined coefficients (or the method of annihilators) to find the general solution to the equation
$$x'' + x = t\cos(t) - \cos(t).$$