

In the questions below y is a function of x .

Q1) Solve the DE: $y'' - 2y' + 2y = x + 1$.

Q2) a) Solve the homogeneous DE: $y''' - 2y'' + y' = 0$.

b) Find the general form of the particular solution of the DE: $y''' - 2y'' + y' = 1 + xe^x$.

Solution