

① (a) Solve the IVP $y'' + 4y' - 5y = 0$, $y(0) = 0$, $y'(0) = 8$

(b) Solve the IVP $y'' + 4y' - 5y = 1 + x^2$, $y(0) = 0$, $y'(0) = 8$.

② (a) Find the general solution of $y'' - 2y' + y = 0$.

(b) Find a particular solution of $y'' - 2y' + y = 3xe^x$.