1) RHB 20.12  
2) RHB 20.18  
3) RHB 20.19  
4) Find the general solution of the equation

\[
\frac{\partial^2 u}{\partial x^2} + \frac{\partial^2 u}{\partial x \partial y} - 6 \frac{\partial^2 u}{\partial y^2} = 6x^2 y
\]

The solution should contain two arbitrary functions. Fix them by imposing the boundary conditions

\[u(x = 0, y) = 0, \quad u(x, y = 0) = x\]

Is that a unique solution?