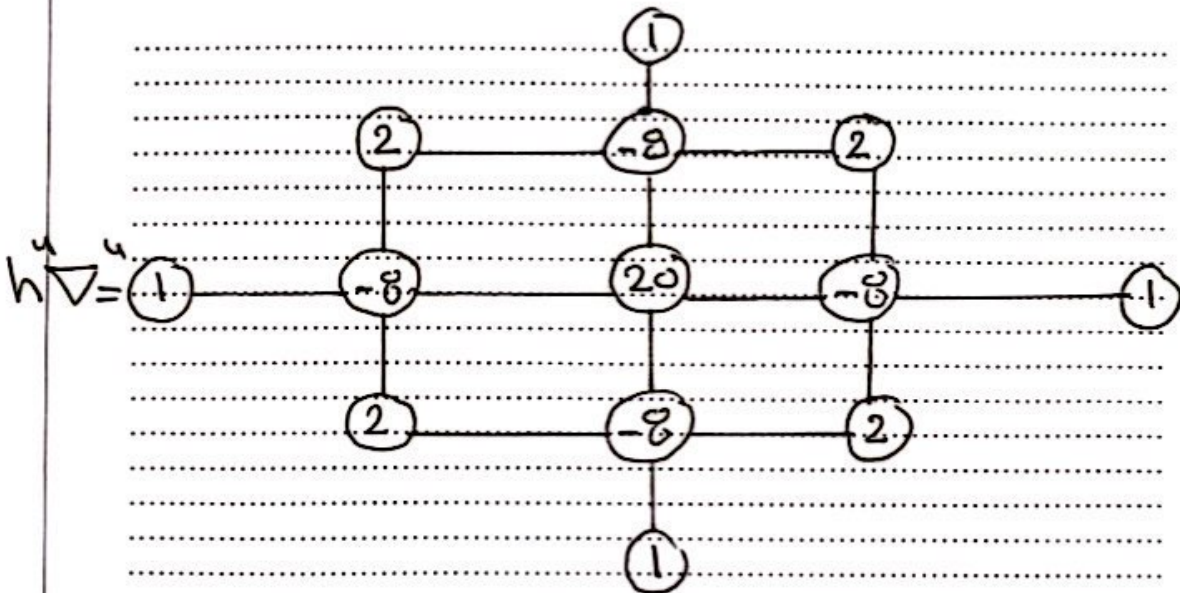
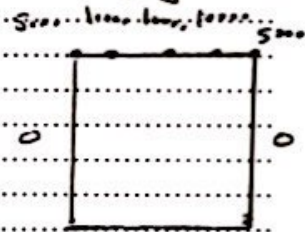


## Engineering Analysis & Numerical Methods



Example: Solve the partial differential equation for the plate shown in fig.

$$\nabla^2 u = \frac{\partial^2 u}{\partial x^2} + \frac{\partial^2 u}{\partial y^2} = 0$$



$$\nabla^2 u = \begin{matrix} & 1 & & \\ 1 & -4 & 1 & \\ & 1 & & \end{matrix}$$

