You will need matrices a lot

$$\begin{bmatrix} \dfrac{\partial u}{\partial x} & \dfrac{\partial u}{\partial y} \\ \dfrac{\partial v}{\partial x} & \dfrac{\partial v}{\partial y} \end{bmatrix}$$

Rounded version are also very popular; dfrac forces the fraction to be display size (tfrac for text size).

$$\begin{pmatrix} \dfrac{\partial u}{\partial x} & \dfrac{\partial u}{\partial y} \\ \dfrac{\partial v}{\partial x} & \dfrac{\partial v}{\partial y} \end{pmatrix}$$

Cases

$$|x| = \begin{cases} x & \text{if } x > 0, \\ -x & \text{if } x < 0, \\ 0 & \text{if } x = 0. \end{cases}$$