$$\nabla = \boldsymbol{e}_x \frac{\partial}{\partial x} + \boldsymbol{e}_y \frac{\partial}{\partial y} + \boldsymbol{e}_z \frac{\partial}{\partial z}$$

$$\nabla^2 = \nabla . \nabla = \frac{\partial^2}{\partial x^2} + \frac{\partial^2}{\partial y^2} + \frac{\partial^2}{\partial z^2}$$

$$\left(\nabla^2\right) f = \partial_y^2 f + \partial_z^2 f$$

$$\nabla \cdot (\nabla f) = \partial_x^2 f + \partial_y^2 f + \partial_z^2 f$$

$$\nabla^2 = \nabla \cdot \nabla = \frac{2}{r}\frac{\partial}{\partial r} + \frac{1}{r^2 \tan(\theta)}\frac{\partial}{\partial \theta} + \frac{\partial^2}{\partial r^2} + r^{-2}\frac{\partial^2}{\partial \theta^2} + \frac{1}{r^2 \sin(\theta)^2}\frac{\partial^2}{\partial \phi^2}$$

$$\left(\nabla^2\right) f = \frac{r^2 \partial_r^2 f + 2r\partial_r f + \partial_\theta^2 f + \frac{\partial_\theta f}{\tan(\theta)} + \frac{\partial_\phi^2 f}{\sin(\theta)^2}}{r^2}$$

$$\nabla \cdot (\nabla f) = \frac{r^2 \partial_r^2 f + 2r\partial_r f + \partial_\theta^2 f + \frac{\partial_\theta f}{\tan(\theta)} + \frac{\partial_\phi^2 f}{\sin(\theta)^2}}{r^2}$$

$$\begin{bmatrix} \boldsymbol{e}_x \frac{\partial}{\partial x} + \boldsymbol{e}_y \frac{\partial}{\partial y} + \boldsymbol{e}_z \frac{\partial}{\partial z}, \\ \boldsymbol{e}_x \frac{\partial}{\partial x} + \boldsymbol{e}_y \frac{\partial}{\partial y} + \boldsymbol{e}_z \frac{\partial}{\partial z} \end{bmatrix}$$

$$F = F^r \boldsymbol{e}_r + F^\theta \boldsymbol{e}_\theta + F^\phi \boldsymbol{e}_\phi$$

$$F = \begin{matrix} F^r \boldsymbol{e}_r \\ + F^\theta \boldsymbol{e}_\theta \\ + F^\phi \boldsymbol{e}_\phi \end{matrix}$$

$$F = \begin{pmatrix} F^r \boldsymbol{e}_r \\ + F^\theta \boldsymbol{e}_\theta, \\ + F^\phi \boldsymbol{e}_\phi \end{pmatrix} \begin{pmatrix} F^r \boldsymbol{e}_r \\ + F^\theta \boldsymbol{e}_\theta \\ + F^\phi \boldsymbol{e}_\phi \end{pmatrix}$$