$$\mathbf{B} = B^{xy} \mathbf{e_x} \wedge \mathbf{e_y} + B^{xz} \mathbf{e_x} \wedge \mathbf{e_z} + B^{yz} \mathbf{e_y} \wedge \mathbf{e_z}$$

$$\nabla f = \partial_x f \mathbf{e_x} + \partial_y f \mathbf{e_y} + \partial_z f \mathbf{e_z}$$

$$\nabla \cdot \mathbf{A} = \partial_x A^x + \partial_y A^y + \partial_z A^z$$

$$\nabla \mathbf{A} = (\partial_x A^x + \partial_y A^y + \partial_z A^z)$$

$$+ (-\partial_x A^x + \partial_y A^y + \partial_z A^z)$$

 $+ (-\partial_y A^x + \partial_x A^y) \mathbf{e_x} \wedge \mathbf{e_y} + (-\partial_z A^x + \partial_x A^z) \mathbf{e_x} \wedge \mathbf{e_z} + (-\partial_z A^y + \partial_y A^z) \mathbf{e_y} \wedge \mathbf{e_z}$ $-I(\nabla \wedge \mathbf{A}) = (-\partial_z A^y + \partial_y A^z) \mathbf{e_x} + (\partial_z A^x - \partial_x A^z) \mathbf{e_y} + (-\partial_y A^x + \partial_x A^y) \mathbf{e_z}$

 $A = A^x e_x + A^y e_y + A^z e_z$

$$\nabla \boldsymbol{B} = (-\partial_y B^{xy} - \partial_z B^{xz}) \, \boldsymbol{e_x} + (\partial_x B^{xy} - \partial_z B^{yz}) \, \boldsymbol{e_y} + (\partial_x B^{xz} + \partial_y B^{yz}) \, \boldsymbol{e_z}$$

$$+ (\partial_z B^{xy} - \partial_y B^{xz} + \partial_x B^{yz}) \, \boldsymbol{e_x} \wedge \boldsymbol{e_y} \wedge \boldsymbol{e_z}$$

 $\nabla \wedge \mathbf{B} = (\partial_z B^{xy} - \partial_y B^{xz} + \partial_x B^{yz}) \, \mathbf{e_x} \wedge \mathbf{e_y} \wedge \mathbf{e_z}$ $\nabla \cdot \mathbf{B} = (-\partial_y B^{xy} - \partial_z B^{xz}) \, \mathbf{e_x} + (\partial_x B^{xy} - \partial_z B^{yz}) \, \mathbf{e_y} + (\partial_x B^{xz} + \partial_y B^{yz}) \, \mathbf{e_z}$