

NAME: _____

Study Sections 3.1 - 3.3 on Maxwell's equations in differential form.

In particular, make sure you follow step, by step, the derivation in Section 3.1 which leads to the expression for the curl in cartesian coordinates (3.18a). With the help of Appendix B, repeat the above steps and derive expressions for the curl in cylindrical and spherical coordinates, and make sure they match expressions (3.18b) and (3.18c), respectively.