

**Special Problem 2-4.1**

A point in space is specified with Cartesian coordinates as:

$$x = -1, \quad y = -1, \quad z = 1$$

- a) Specify this point using cylindrical coordinates.
- b) Specify this point using spherical coordinates.
- c) Determine the distance of this point from the  $x$ - $y$  plane.
- d) Determine the distance of this point from the  $z$ -axis.
- e) Determine the distance of this point from the origin.