Cylindrical Coordinates

Practice Your Understanding

Name: _____
Date: _____

1. Write down the equations for converting from Cartesian coordinates to Cylindrical coordinates and for converting from Cylindrical coordinates to Cartesian coordinates below:

2. Using the formula for converting from Cartesian to Cylindrical coordinates, calculate the Cylindrical coordinates for the point (3.2, -7.5, -4.8) (x, y, z). Show all of your work for the conversion in the box below:

3. Using the formula for converting from Cylindrical to Cartesian coordinates, calculate the Cartesian coordinates for the point (7.6, 65.32, 8.9) (r, θ, z). Show work for the conversion in the box below (Note: You can round your answer to up to two decimal places):