

Unit 5 HW (Disks and Shells)
MultiV 2021-22 / Dr. Kessner

For each of the following shapes:

- a) Express the volume as a triple integral in cylindrical coordinates in two ways (disks and shells). Solve each, and verify your answer with a formula.
 - b) Calculate the lateral surface area, treating the shape as a surface of revolution. Verify your answer with a formula.
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1. Cylinder with radius 5 and height 6.
 2. Cone with radius 2 and height 3.
 3. Sphere with radius a .