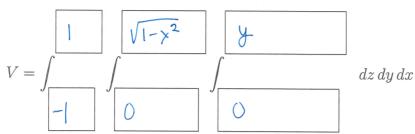
- 2. Let V be the volume of the solid bounded by the cylinder  $x^2 + y^2 = 1$  on the sides, the plane z = yat the top, and the xy-plane at the bottom.
- a. Only three of **1-4** will be graded. Mark the ones you want to be graded by putting a **X** in the corresponding  $\square$  s.
  - $\bullet$   $\boxtimes$  Express V in terms of iterated integrals in Cartesian coordinates by filling in the rectangles.

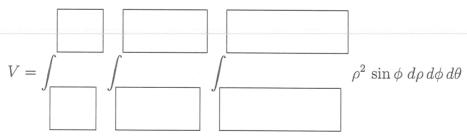


$$V = \int_{0}^{1} \int_{z}^{z} \int_{z}^{z} dx \, dy \, dz$$

 $\bullet$  Express V in terms of iterated integrals in cylindrical coordinates by filling in the rectangles.

$$V = \int_{0}^{\pi} \int_{0}^{\pi} r \, dz \, dr \, d\theta$$

 $\bullet$   $\square$  Express V in terms of iterated integrals in spherical coordinates by filling in the rectangles.



**b.** Compute V.

