2020 SPRING CALCULUS 0412: QUIZ 17 (JUNE 8, 2020)

NAME: STUDENTS ID:

1. (5 points) Write the equation $2x^2 + 2y^2 - z^2 = 4$ in terms of the cylindrical coordinates.

2. (5 points) Sketch the solid whose volume is given by $\int_0^{\pi/4} \int_0^{2\pi} \int_0^{\sec\phi} \rho^2 \sin\phi \, d\rho d\theta d\phi$.