1. Let E be the solid region bounded by the planes $x = 1$, $z = 0$, $z = x$, and the surface $x = 2 - y^2$. Calculate $\iiint_E yz\, dV$.

2. Rewrite the integral $\int_0^2 \int_0^{\sqrt{4-y^2}} \int_0^{2-\sqrt{x^2+y^2}} x\, dz\, dx\, dy$ in cylindrical coordinates. *Do not evaluate the integral.*