

4. Find the surface area of the function $z = xy$ over the region bounded inside the cylinder $x^2 + y^2 = 2$.

5. Set up the integral needed to find the surface area of the function $\vec{r}(u, v) = u^2 \cos v \hat{i} + u^2 \sin v \hat{j} + uv \hat{k}$ over the region $0 \leq u \leq 3, 0 \leq v \leq 2\pi$. You do not need to integrate.