1. Find the volume under \( f(x, y) = e^x + xe^y \) over the rectangle \( R = [0, 1] \times [0, 2] \). (Leave “e” in your answer.)

2. Set up an integral (just one) for the volume under the surface \( z = 3 + \sin(xy) \) and over the triangle with vertices \((0, 0)\), \((0, 7)\), and \((2, 1)\).
   Do not actually find the integral—just set it up.

3. Find the integral \( \int_0^1 \int_{2x}^2 e^{y^2} \, dy \, dx \).