1. Find the volume below the surface $z = 1 + x + y$ and above the rectangle $R = \{(x, y)|0 \leq x \leq 2, 0 \leq y \leq 3\}$ in the xy-plane.

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&= \left(\frac{15}{2} x + \frac{3}{2} x^2 \right) \Big|_0^2 = (15 + 6) - (0 + 0) = 21
\end{aligned}$$

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&= 4e^x \big|_{-1}^{1} = 4e - \frac{4}{e}
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$$