Problem statement Compute $\int_1^2 \int_x^{x^2} \int_z^{zx} xyz \ d?_1 \ d?_2 \ d?_3$ where $?_1$ and $?_2$ and $?_3$ stand for some ordering of the variables x and y and z which you must determine. (Only one of the 6 possible selections "makes sense", though!)