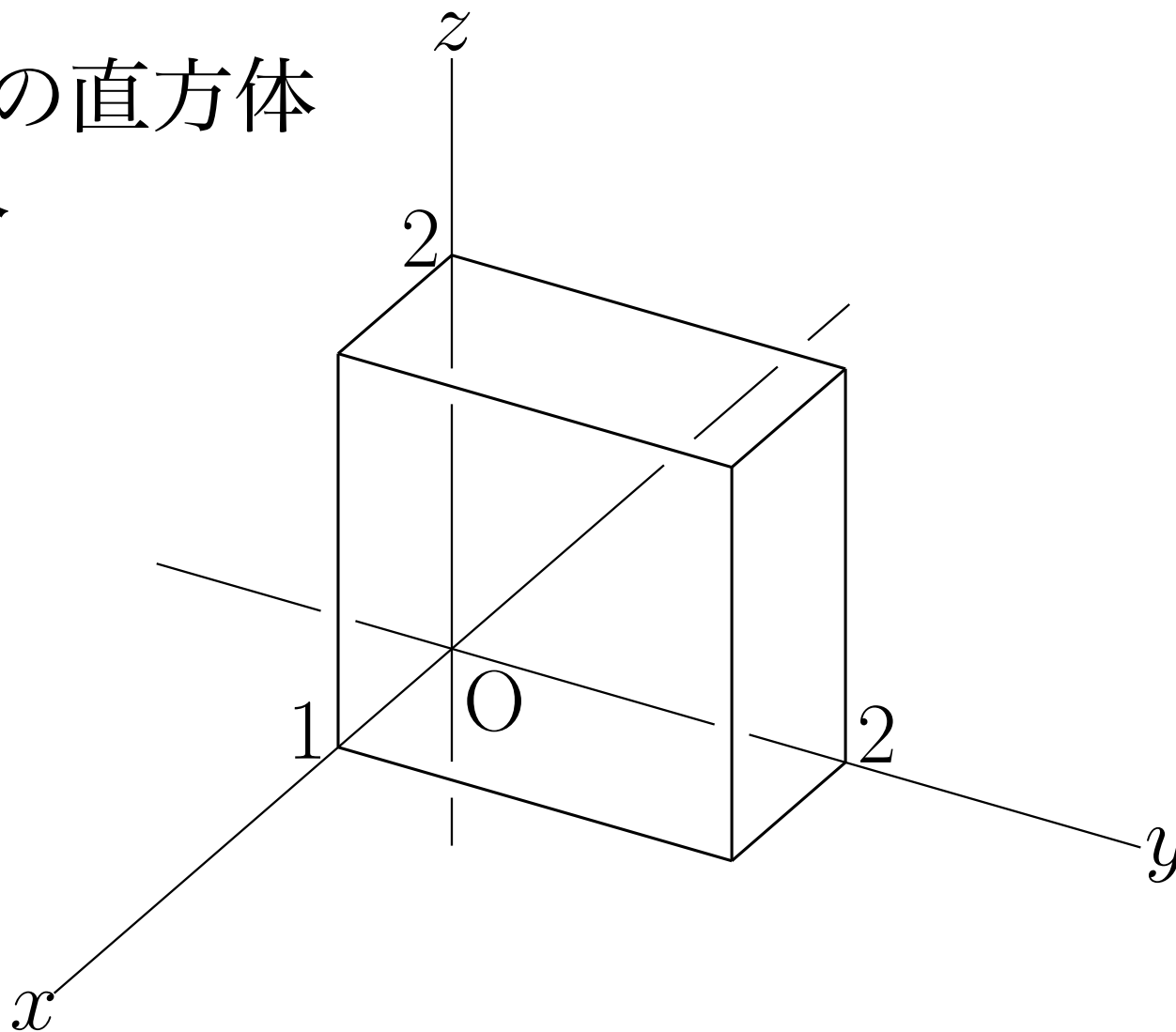


積分領域は図の直方体
で囲まれる部分



$$\begin{aligned}\text{与式} &= \int_1^2 \left\{ \int_0^1 \left\{ \int_0^2 (2x + y - z) dx \right\} dy \right\} dz \\ &= \int_1^2 \left\{ \int_0^1 \left[x^2 + xy - xz \right]_0^2 dy \right\} dz \\ &= \int_1^2 \left\{ \int_0^1 (4 + 2y - 2z) dy \right\} dz\end{aligned}$$

$$= \int_1^2 \left[4y + y^2 - 2yz \right]_0^1 dz$$

$$= \int_1^2 (4 + 1 - 2z) dz$$

$$= \left[5z - z^2 \right]_1^2 = 2$$