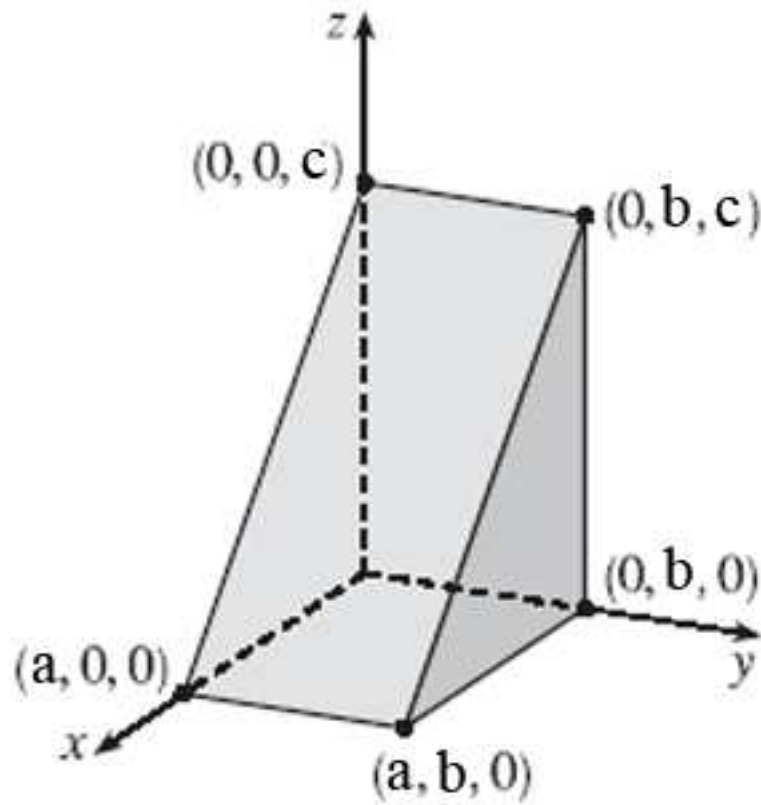


$z = 8 - x \geq 0$ for $0 \leq x \leq 8$, so we can interpret the integral as the volume of the solid S that lies below the plane $z = 8 - x$ and above the rectangle $[0, 8] \times [0, 4]$. S is a triangular cylinder whose volume is $4(\text{area of triangle}) = 4\left(\frac{1}{2} \cdot 8 \cdot 8\right) = 128$. Thus $\iint_R (8-x) dA = 128$



Assume $a = 8$
 $b = 4$
 $c = 8$