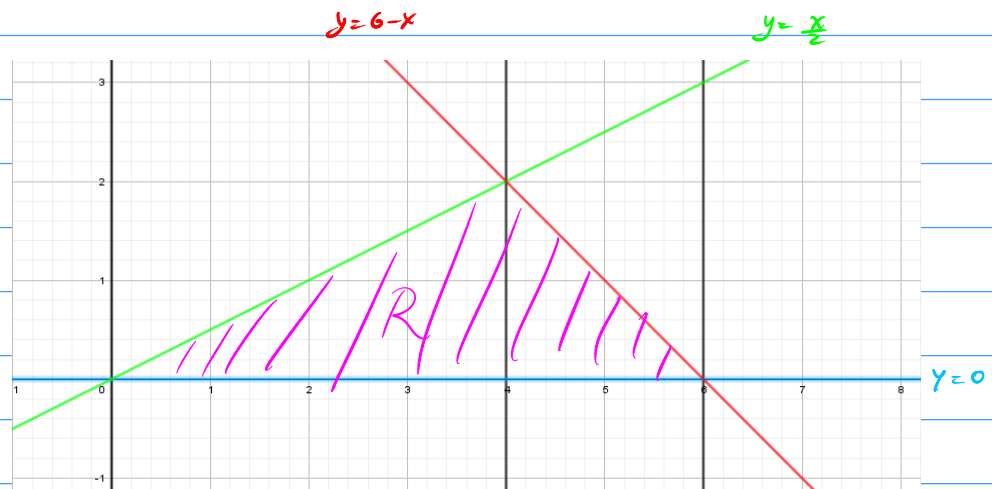


Pregunta 1

a)



b) cambiar el orden

despejamos las x

$$y = 6 - x \\ \Rightarrow x = 6 - y$$

$$y = \frac{x}{2} \\ \Rightarrow 2y = x$$

intersección

$$\left\{ \begin{array}{l} 2y = 6 - y \\ 2y + y = 6 \\ 3y = 6 \\ \underline{y = 2} \end{array} \right.$$

integral:

$$\int_0^2 \int_{2y}^{6-y} dx dy$$

$$= \int_0^2 (6 - y - 2y) dy$$

$$= \int_0^2 (6 - 3y) dy = 6y - \frac{3y^2}{2} \Big|_0^2$$

$$= 6 \cdot 2 - \frac{3 \cdot (2)^2}{2} - \left(6 \cdot 0 - \frac{3 \cdot 0^2}{2} \right)$$

$$= \underline{\underline{6 \text{ u}^2}}$$