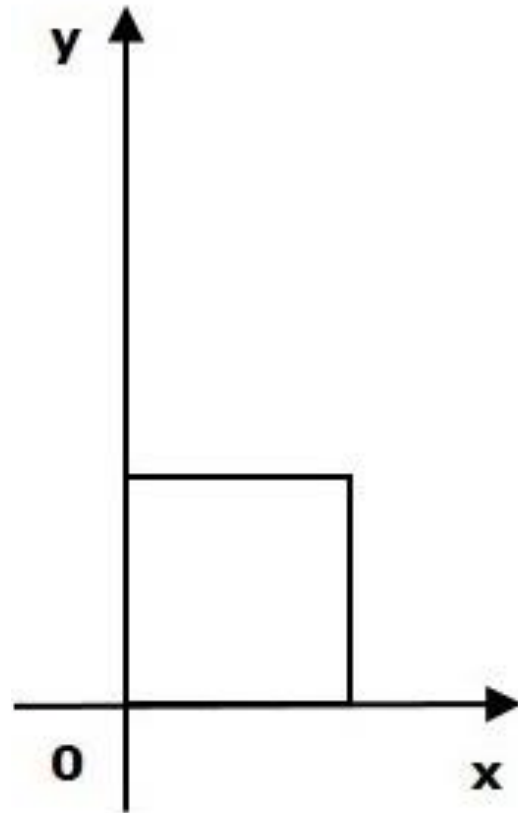
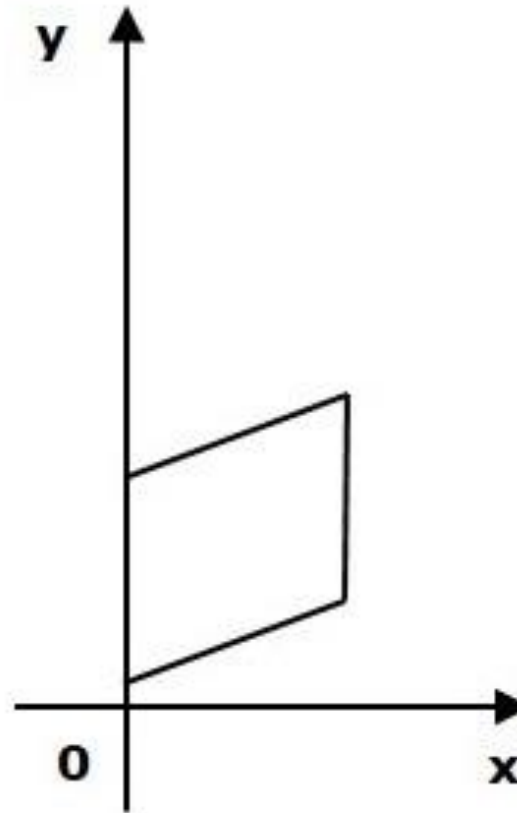


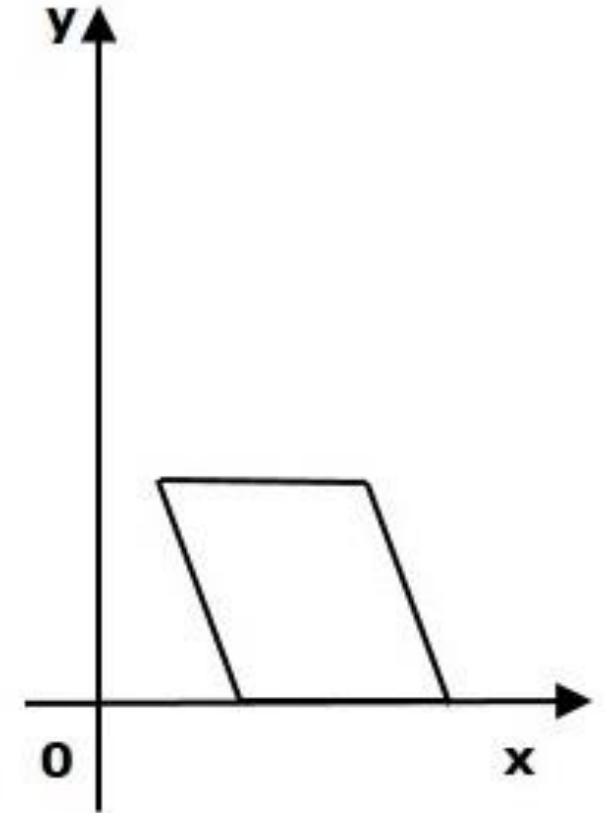
Shear



Original object



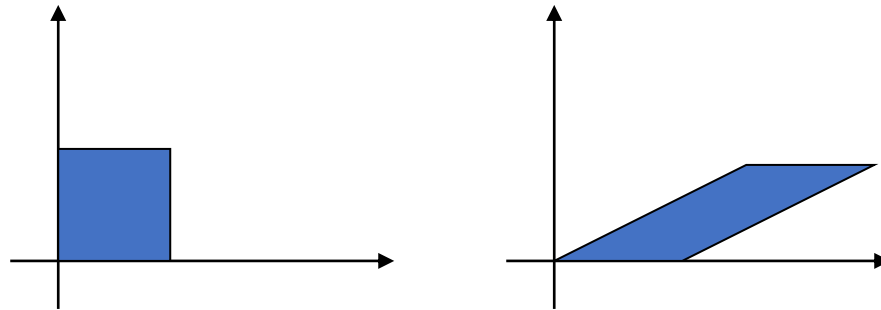
After y shear



After x shear

- The x-direction shear relative to x axis

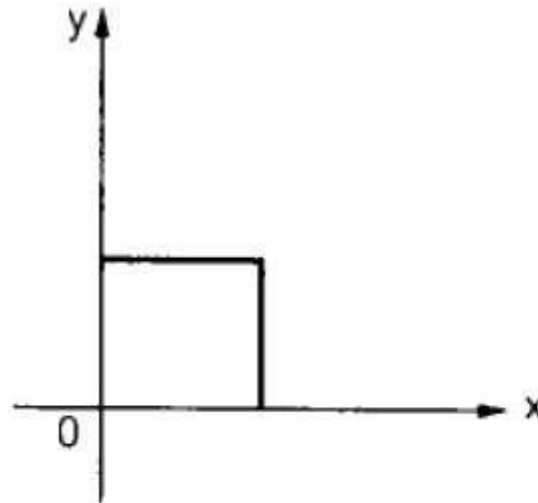
$$\begin{bmatrix} 1 & sh_x & 0 \\ 0 & 1 & 0 \\ 0 & 0 & 1 \end{bmatrix} \quad \begin{aligned} x' &= x + sh_x \cdot y \\ y' &= y \end{aligned}$$



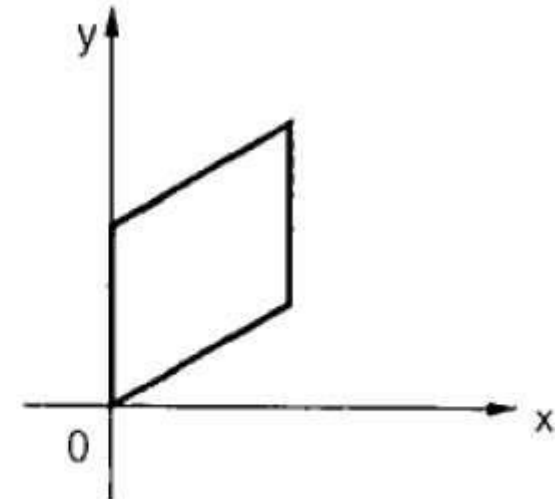
- The Y direction shear

$$\begin{bmatrix} 1 & 0 & 0 \\ sh_y & 1 & 0 \\ 0 & 0 & 1 \end{bmatrix}$$

$$Y' = Y + Sh_y \cdot X$$
$$X' = X$$



(a) Original object



(b) Object after y shear