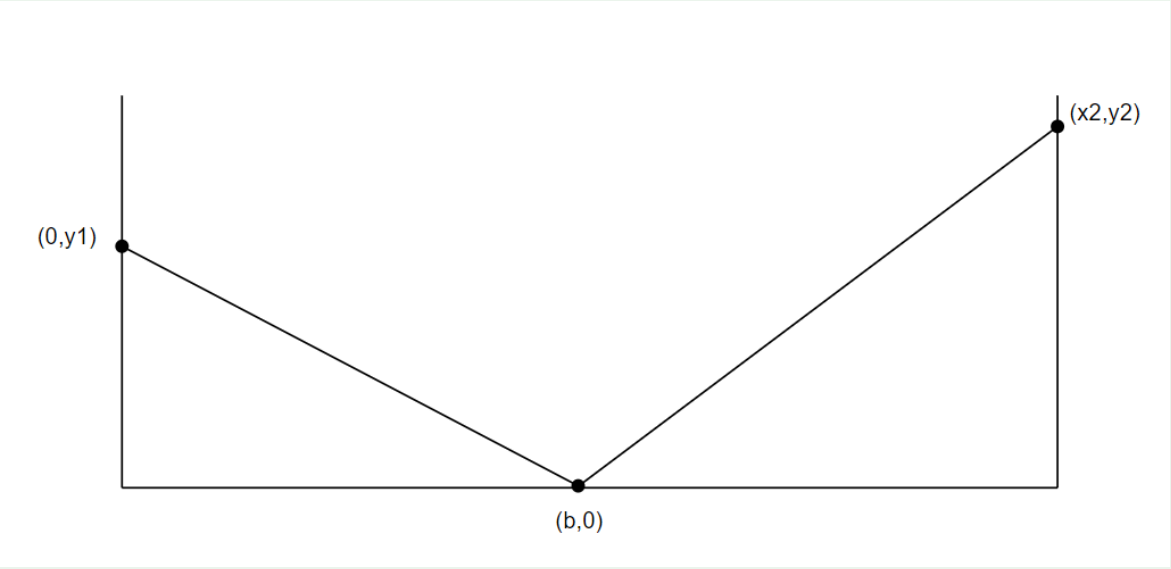
Bonus Question

Claim 0.0.1

Consider an arbitrary set of points $(0, y_1)$, $(b, 0)$, and (x_2, y_2) in $\mathbb{R}^2$ where $y_1, x_2, y_2, b \in \mathbb{R}_{>0}$.

Fix y_1, x_2, y_2. If the distance from $(0, y_1)$ to $(b, 0)$ is (x_2, y_2) is minimum, then the triangles are similar.



Solution: