

Homework of quotient space

Let $X = \{x \mid x = (x_1, x_2) \in \mathbb{R}^2\}$. The vector x, y in X can be drawn as a vector in the following figure. Y is a line through the origin as described in the figure. Then Y is a subspace. Please draw the congruence class mod Y of x and y and draw the sum of two congruence classes $\{x\} + \{y\}$.

