



A diagram illustrating a region $NW(P_t)$ in a 2D coordinate system. The origin is marked by a black dot at the intersection of a horizontal dashed line and a vertical dashed line. The region $NW(P_t)$ is a shaded gray square in the upper-left quadrant, bounded by the vertical dashed line on its right and the horizontal dashed line on its bottom. The label $NW(P_t)$ is centered within this shaded region.

$NW(P_t)$

$P_t = (x_t, y_t)$