

Let α be an irrational multiple of π , and place a "walker" at the origin of \mathbb{Z} . Pick a point x randomly uniformly on the unit circle, and start rotating it by the angle α . Every time the point falls in the top half of the circle, move the walker one step to the right, and every time the point falls in the bottom half of the circle, move the walker one step to the left. For special values of α , we give detailed analysis of the number of time the walker returns to 0 up to time n .