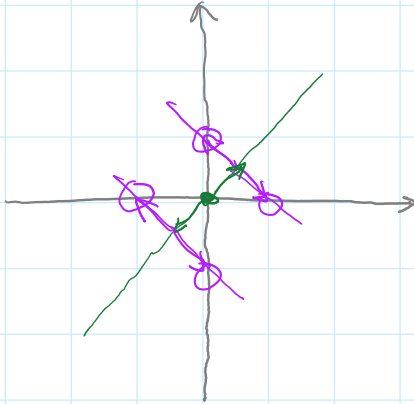


SIMPLE SYMMETRIC RW Return to origin:

1D: number of visits to the origin: $\sum_{k=1}^{\infty} \frac{1}{\sqrt{\pi k}} \rightarrow \infty$

2D:



number of visits to
the origin:

$$\sum_{k=1}^{\infty} \frac{1}{\pi k} \rightarrow \infty \text{ DIVERGES}$$