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~~Settlers of Catan~~ A board game is played on a hexagonal grid of 19 tiles. A 'traveler' token starts on the center tile. Each turn a die is rolled to determine what neighboring tile the traveler moves to (all six directions equally likely). The turn that the traveler leaves the board, the game ends. What is the expected number of turns of the game?

The diagram shows a hexagonal lattice structure. The central cell is labeled 0. The cells are numbered 0 to 18. The vertices are numbered 1 to 19. The vertices are labeled with numbers 1 through 19. The cells are numbered 0 to 18, and the vertices are numbered 1 to 19.

$$\mathbb{E}(N) = \sum N \mathbb{P}(N)$$

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[illegible]

$$t = N\mathbf{1}$$
[illegible]

Finally, we see that  $t_0 = \boxed{\frac{213}{29} \approx 7.345}$