Distribution of walk lengths

steps (N) = 32, 1000000 simulated walks: fitted gamma functions 0.200 Pythagorean Density plot Manhattan Density plot 0.175 expected pythag walk length expected manhat walk length 0.150√N 0.125 Density 0.100 -0.075 0.050 0.025 0.000 0.0 2.5 5.0 7.5 10.0 12.5 15.0 17.5 20.0 Walk length (N)