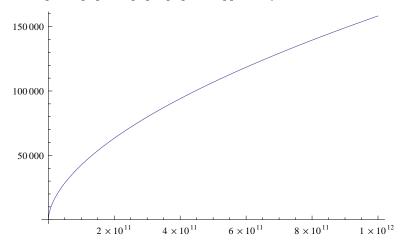
Plot[Sqrt[#] Log[#] &[s[N, 10]] /8, {N, 1, 1000000000000}]



Log[10 ^14] ^3 // N

33498.9

Log[10 ^15] // N

34.5388