Greeks for concentrated liquidity positions and optimal liquidity

March 1, 2023

Table 1: Greeks for concentrated liquidity positions

σ	Pa	Pb	Range factor	δ	γ
0.5	999	1001	1.001	0.499625	-0.000001
	990	1010	1.010	0.496250	-0.000005
	909	1100	1.100	0.487820	-0.000052
	833.33	1200	1.200	0.477220	-0.000110
	500	2000	2.000	0.414214	-0.000707
	200	5000	5.000	0.309017	-0.004472
1	999	1001	1.001	0.499625	-0.000001
	990	1010	1.010	0.496250	-0.000005
	909	1100	1.100	0.487820	-0.000052
	833.33	1200	1.200	0.477220	-0.000110
	500	2000	2.000	0.414214	-0.000707
	200	5000	5.000	0.309017	-0.004472

Table 2: Choosing Optimal Uniswap V3 LP Positions

Target δ	σ	Price	Time (Days)	Pa	Pb
	0.50	3300	14	2839.6589	3882.076
		2200		1893.1059	2588.051
		1800		1548.9049	2117.496
		1500		1290.7541	1764.580
		1000		860.5027	1176.387
		3300	28	2223.2485	5400.835
		2200		1482.1657	3600.557
0.5	1.00	1800		1212.6810	2945.910
		1500		1010.5675	2454.925
		1000		673.7117	1636.617
		3300	42	1868.6314	7327.414
	1.25	2200		1245.7543	4884.943
		1800		1019.2535	3996.771
		1500		849.3779	3330.643
		1000		566.2520	2220.428