Group D Answers

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(b)

SD and SE will be affected by NSIM than NT. For Batch1, even NT are different (one is 100, another is 500), the SD and SE are the same. Batch 2 also has the same case. And increasing NSIM, both of SD and SE will be decrease.

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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | NT | NSIM | Call | SD(CALL) | SE(CALL) | Put | SD(PUT) | SE(PUT) |
| Batch 1 | 100 | 10, 000 | 2.1378 | 0.0492115 | 0.000492115 | 5.90807 | 0.082927 | 0.00082927 |
| 100 | 100, 000 | 2.13043 | 0.0154691 | 4.89177e-05 | 5.87321 | 0.0261535 | 8.27046e-05 |
| 100 | 1,000, 000 | 2.13271 | 0.00489559 | 4.89559e-06 | 5.85125 | 0.00824925 | 8.24925e-06 |
| 500 | 10, 000 | 2.12704 | 0.049751 | 0.00049751 | 5.93754 | 0.0834083 | 0.000834083 |
| 500 | 100, 000 | 2.14863 | 0.0156069 | 4.93534e-05 | 5.83818 | 0.0260652 | 8.24255e-05 |
| 500 | 1,000, 000 | 2.13249 | 0.00489559 | 4.89559e-06 | 5.84333 | 0.00824925 | 8.24925e-06 |
| Batch 2 | 100 | 10, 000 | 7.94097 | 0.0812178 | 0.000574297 | 8.06336 | 0.0788038 | 0.000557227 |
| 100 | 100, 000 | 7.94362 | 0.0255874 | 5.72152e-05 | 8.0079 | 0.0248562 | 5.55801e-05 |
| 100 | 1,000, 000 | 7.9625 | 0.00809833 | 5.72638e-06 | 7.97439 | 0.00783845 | 5.54262e-06 |
| 500 | 10, 000 | 7.93258 | 0.0818211 | 0.000578563 | 8.13742 | 0.0793531 | 0.000561111 |
| 500 | 100, 000 | 8.01256 | 0.0257749 | 5.76345e-05 | 7.95795 | 0.0247644 | 5.53748e-05 |
| 500 | 1,000, 000 | 7.96142 | 0.00809418 | 5.72345e-06 | 7.95663 | 0.00783094 | 5.53731e-06 |