|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 1 | 10 | 100 | 500 | 1000 | 5000 | 10000 | 50000 | 100000 |
| 1 | 1.46 | 6.96 | 8.77 | 9.09 | 9.12 | 9.03 | 8.92 | 8.98 | 8.62 |
| 2 | 0.55 | 5.42 | 16.84 | 17.32 | 17.35 | 16.95 | 16.42 | 16.87 | 17.79 |
| 4 | 0.44 | 3.82 | 17.08 | 24.84 | 28.26 | 27.66 | 27.04 | 28.63 | 31.32 |
| 6 | 0.36 | 3.07 | 16.97 | 32.58 | 37.36 | 40.17 | 40.93 | 40.73 | 39.6 |
| 8 | 0.33 | 2.86 | 17.81 | 40.48 | 44.8 | 51.9 | 53.22 | 53.49 | 54.38 |
| 10 | 0.28 | 3.16 | 17.56 | 46.78 | 52.5 | 63.27 | 65.29 | 65.41 | 64.46 |

Graphs are in next page.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |  |  |  |  |

I think the actual probability is around 6.5% with a +/- of .1%

S= time 1 thread/time 10 thread = 64.46/8.62

S = 0.133726342

Fp = 10/9\*(1-1/s) = 10/9\*(1-1/0.133726342)

Fp = 0.96252628676

Parallel fraction Fp is around 0.96