Results for 5.10:

|  |  |  |
| --- | --- | --- |
| Thread Count | N | Time (seconds) |
| 1 | 100 | 1.405890e-04 |
| 2 | 100 | 2.331740e-04 |
| 3 | 100 | 8.740662e-03 |

Based on these results, we can see that different executions of my sum += sin(i) are all treated as a single critical section. This implementation of OpenMP does not allow simultaneous execution of updates to different variables when the updates are protected by atomic directives.