# RESULTADOS EJERCICIOS MPI - CLUSTER ARENAL
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**E1**

|   | WTime | | | Aceleración | | | Eficiencia | | |
|---|---|---|---|---|---|---|---|---|---|
| *p* | cv = 1,000 | cv = 10,000 | cv = 100,000 | cv = 1,000 | cv = 10,000 | cv = 100,000 | cv = 1,000 | cv = 10,000 | cv = 100,000 |
| 1 | 0.0003 | 0.0024 | 0.0215 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| 2 | 0.0002 | 0.0012 | 0.0118 | 1.5621 | 1.9279 | 1.8189 | 0.7811 | 0.9640 | 0.9095 |
| 4 | 0.0002 | 0.0007 | 0.0051 | 1.5086 | 3.5913 | 4.1879 | 0.3771 | 0.8978 | 1.0470 |
| 8 | 0.0002 | 0.0004 | 0.0030 | 1.7255 | 5.7098 | 7.1257 | 0.2157 | 0.7137 | 0.8907 |

**E2**

|   | WTime | | | Aceleración | | | Eficiencia | | |
|---|---|---|---|---|---|---|---|---|---|
| *p* | cv = 1,000 | cv = 10,000 | cv = 100,000 | cv = 1,000 | cv = 10,000 | cv = 100,000 | cv = 1,000 | cv = 10,000 | cv = 100,000 |
| 1 | 0.0002 | 0.0016 | 0.0154 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| 2 | 0.0001 | 0.0008 | 0.0077 | 1.8316 | 1.9457 | 1.9885 | 0.9158 | 0.9728 | 0.9943 |
| 4 | 0.0001 | 0.0005 | 0.0039 | 1.9551 | 3.5022 | 3.9429 | 0.4888 | 0.8756 | 0.9857 |
| 8 | 0.0008 | 0.0013 | 0.0026 | 0.2161 | 1.2370 | 5.8813 | 0.0270 | 0.1546 | 0.7352 |

**E3**

|   | WTime | | | Aceleración | | | Eficiencia | | |
|---|---|---|---|---|---|---|---|---|---|
| *p* | cv = 1,000 | cv = 10,000 | cv = 100,000 | cv = 1,000 | cv = 10,000 | cv = 100,000 | cv = 1,000 | cv = 10,000 | cv = 100,000 |
| 1 | 0.0414 | 19.5774 | inf | 1.0000 | 1.0000 | n/a | 1.0000 | 1.0000 | n/a |
| 2 | 0.0285 | 14.5600 | inf | 1.4512 | 1.3446 | n/a | 0.7256 | 0.6723 | n/a |
| 4 | 0.0186 | 9.3329 | inf | 2.2285 | 2.0977 | n/a | 0.5571 | 0.5244 | n/a |
| 8 | 0.0115 | 5.2720 | inf | 3.5902 | 3.7135 | n/a | 0.4488 | 0.4642 | n/a |

**E4**

|   | WTime | | | Aceleración | | | Eficiencia | | |
|---|---|---|---|---|---|---|---|---|---|
| *p* | cv = 1,024 | cv = 8,192 | cv = 65,536 | cv = 1,024 | cv = 8,192 | cv = 65,536 | cv = 1,024 | cv = 8,192 | cv = 65,536 |
| 1 | 0.0025 | 0.0203 | 0.1547 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| 2 | 0.0013 | 0.0108 | 0.0880 | 1.8782 | 1.8781 | 1.7589 | 0.9391 | 0.9390 | 0.8795 |
| 4 | 0.0008 | 0.0058 | 0.0486 | 3.0469 | 3.4930 | 3.1815 | 0.7617 | 0.8732 | 0.7954 |
| 8 | 0.0008 | 0.0040 | 0.0251 | 3.0735 | 5.1313 | 6.1562 | 0.3842 | 0.6414 | 0.7695 |

restricción: cv debe ser potencia de 2