Exercício 01

# Detalhado:

(n+1)\*σ= + n\*σ+ + 3\*n\*σrec + n\*σ. + n\*σarm

# Simplificado:

|  |  |
| --- | --- |
| N | custo |
| 10 | 71 |
| 50 | 351 |
| 100 | 701 |
| 500 | 3501 |
| 1000 | 7001 |
| 5000 | 35001 |
| 10000 | 70001 |
| 50000 | 350001 |
| 100000 | 700001 |
| 500000 | 3500001 |

Exercício 02

# Detalhado:

(n+1)\*σ= + n\*σ+ + 5\*n\*σrec + 2\*n\*σ. + n\*σarm

# Simplificado:

|  |  |
| --- | --- |
| N | custo |
| 10 | 101 |
| 50 | 501 |
| 100 | 1001 |
| 500 | 5001 |
| 1000 | 10001 |
| 5000 | 50001 |
| 10000 | 100001 |
| 50000 | 500001 |
| 100000 | 1000001 |
| 500000 | 5000001 |

Exercício 03

# Detalhado:

[lin\*(col+1) + 2]\*σ= + [lin\*(col+1)]\*σ+ + 4\*col\*lin\*σrec + 2\*col\*lin\*σ. + col\*lin\*σarm

# Simplificado:

|  |  |  |
| --- | --- | --- |
| matriz | n elementos | custo |
| 10x10 | 100 | 922 |
| 50x75 | 3750 | 33852 |
| 10000x1 | 10000 | 110002 |
| 100x300 | 30000 | 270202 |
| 500x200 | 100000 | 901002 |
| 1000x1000 | 1000000 | 9002002 |
| 5000x7000 | 35000000 | 315010002 |
| 50000x1000 | 500000000 | 450100002 |
| 50000x25000 | 1250000000 | 11250100002 |
| 100000x100000 | 10000000000 | 90000200002 |

Exercício 04

# Detalhado:

# [4\*n² + 3\*n + 6]\*σ= + [3\*n² + 3\*n]\*σ+ + 18\*n²\*σrec + 10\*n²\*σ. + 2\*n²\*σarm

# Simplificado:

|  |  |
| --- | --- |
| N | custo |
| 10 | 3766 |
| 50 | 92806 |
| 100 | 370606 |
| 500 | 9253006 |
| 1000 | 37006006 |
| 5000 | 925030006 |
| 10000 | 3700060006 |
| 50000 | 92500300006 |
| 100000 | 3,70001E+11 |
| 500000 | 9,25E+12 |