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**Operaciones Aritméticas y Matrices en R**

**## ------ Operaciones Aritméticas y Matrices en R ------------**

**# 1.-----------------------------**

**7-(-8+9)-9**

**1-(5\*3-5)**

**18.99-2.5\*(1.79-24.28)**

**((-3)^5)\*(2)^4\*((-4)^2+(-2))**

**((-3)^5\*(7)^2)/((-4)^2+(-2))**

**# 2. ----------------------------**

**A <- matrix(c(2,3,5,0,0,1,1,0,1), 3, 3)**

**B <- matrix(c(1,1,1,0,2,1,1,1,0), 3, 3)**

**A+B**

**A-B**

**A%\*%B**

**B%\*%A**

**# 3. A^2 + A - 2I = 0 ----------**

**A <- matrix(c(0,1,1,1,0,1,1,1,0), 3, 3)**

**I <- matrix(c(1,0,0,0,1,0,0,0,1), 3, 3)**

**A%\*%A-A-2\*I**

**RESULTADOS**

> ## ------ Operaciones Aritméticas y Matrices en R ------------

> # 1.-----------------------------

> 7-(-8+9)-9

[1] -3

> 1-(5\*3-5)

[1] -9

> 18.99-2.5\*(1.79-24.28)

[1] 75.215

> ((-3)^5)\*(2)^4\*((-4)^2+(-2))

[1] -54432

> ((-3)^5\*(7)^2)/((-4)^2+(-2))

[1] -850.5

> # 2. ----------------------------

> A <- matrix(c(2,3,5,0,0,1,1,0,1), 3, 3)

> B <- matrix(c(1,1,1,0,2,1,1,1,0), 3, 3)

> A

[,1] [,2] [,3]

[1,] 2 0 1

[2,] 3 0 0

[3,] 5 1 1

> B

[,1] [,2] [,3]

[1,] 1 0 1

[2,] 1 2 1

[3,] 1 1 0

> A+B

[,1] [,2] [,3]

[1,] 3 0 2

[2,] 4 2 1

[3,] 6 2 1

> A-B

[,1] [,2] [,3]

[1,] 1 0 0

[2,] 2 -2 -1

[3,] 4 0 1

> A%\*%B

[,1] [,2] [,3]

[1,] 3 1 2

[2,] 3 0 3

[3,] 7 3 6

> B%\*%A

[,1] [,2] [,3]

[1,] 7 1 2

[2,] 13 1 2

[3,] 5 0 1

> # 3. A^2 + A - 2I = 0 ----------

> A <- matrix(c(0,1,1,1,0,1,1,1,0), 3, 3)

> I <- matrix(c(1,0,0,0,1,0,0,0,1), 3, 3)

> A%\*%A-A-2\*I

[,1] [,2] [,3]

[1,] 0 0 0

[2,] 0 0 0

[3,] 0 0 0