¡Felicitaciones! ¡Aprobaste!

Calificación recibida 100 % Para Aprobar 80 % o más

Ir al siguiente elemento

1. What can matrices contain? 1/1 punto Dogs Collection of feature vectors for dogs Correcto 2. What does linear algebra study? 1/1 punto linear objects and computations Correcto complexity of computations on strings

✓ linear equations

Correcto

linear objects and computations

⊘ Correcto

complexity of computations on strings

linear equations

✓ Correcto

matrix operations

✓ Correcto

3. Compute matrix-matrix product

1/1 punto

 $\left[\begin{array}{cccc}
1 & 5 \\
3 & 4
\end{array}\right] \quad . \quad \left[\begin{array}{cccc}
5 & 7 \\
0 & 4
\end{array}\right]$

O product =

$$\left[\begin{array}{cccc}
1 & 5 \\
3 & 4
\end{array}\right] \quad . \quad \left[\begin{array}{cccc}
5 & 7 \\
0 & 4
\end{array}\right]$$

product =

- O None of the above
- O product =

product =

Linear combinations

Cuestionario Práctico • 3 total de puntos

1. Write the nutritional values matrix for milk and cereals knowing that 1 cup of milk contains 16 g of carbs, 14 g of protein, 170 g of fat, and 1 cup of cereals contains 98 g of protein, 42 g of fat, 60 g of carbs. Note the order of carbs/fat/protein values in the matrix might differ from what is stated here.

1/1 punto

table of nutrition values =

table of nutrition values =

table of nutrition values =

2. To find nutritional values of our breakfast, we can compute a dot product v*M, where v is a "portion" vector of food ingredients and M is a matrix of nutritional values for each food ingredient.

$$M = \begin{bmatrix} carbs & fat & protein \\ 60 & 98 & 42 & milk \\ 170 & 16 & 14 & cereals \end{bmatrix}$$

Knowing that the breakfast consists of 4 cups of milk and 2 cup of cereals, write vector v.

ovector of milk & cereal portions =

vector of milk & cereal portions =

O vector of milk & cereal portions =

O vector of milk & cereal portions =

3. What is the dimensionality of the product **1/1 punt** AB?

What is the dimensionality of the product AB?

1/1 punto

- (a) 4x5
- 3x3
- none of the other answers is correct.
- Not compatible
 - Correcto

4. What is the dimensionality of matrix A? 1/1 punto

- 3x5
- 5x3
- O None of the above
 - ✓ Correcto



Matrix Combinations

Cuestionario Calificado

Vencimiento 4 de jun. 23:59 PDT

Calificación del último envío 100 % Para Aprobar 80 % o más

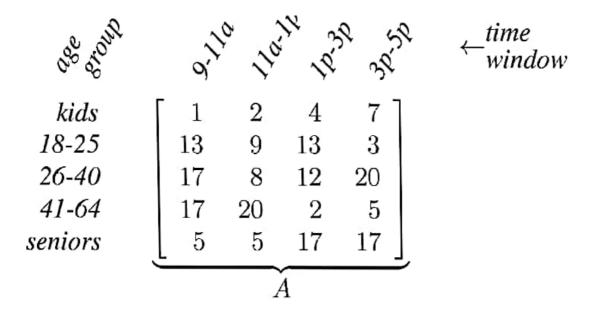
Ir al siguiente elemento

Which of the following expressions yields the vector of visitor counts arriving after 1pm, broken down by age group (expression should yield [5, 16, 32, 7, 34]')?



1 / 1 punto

2. Regarding this table of visitors to a museum exhibit during one day:



Which of the following expressions yields the vector of adult visitors broken down by time period?

Correcto

3. Regarding this table of museum visitors:

1/1 punto

as agoud	9,1	10 10	in di	ક્ષ્યું જ ક્ષ્યુ	←time ←window
kids 18-25	$\begin{bmatrix} 1 \\ 12 \end{bmatrix}$	2	4	7	
26-40	13 17	9 8	13 12	20	
41-64 seniors	17 5	20 5	$\frac{2}{17}$	5 17	
			4		

Which of these expressions computes the total number of seniors arriving over the whole day (44)?

Correcto

4. Regarding this table of museum visitors

1/1 punto

os signif	9,1	0 70	A Sh Si	खे. १९ ५९	←time ←window
kids	$\begin{bmatrix} 1 \end{bmatrix}$	2	4	7]	
18-25	13	9	13	3	
26-40	17	8	12	20	
41-64	17	20	2	5	
seniors	5	5	17	17	
			$\widetilde{4}$		

What is the numerical result of the following expression

$$\begin{bmatrix} 0 & 1 & 0 & 0 & 0 \end{bmatrix} \cdot A \cdot \begin{bmatrix} 1 \\ 0 \\ 0 \end{bmatrix}$$

9

ln

✓ Correcto

what is the result of the following expression?

$$\begin{bmatrix} 1 & 1 & 0 & 0 & 0 \end{bmatrix} \cdot A \cdot \begin{bmatrix} 1 \\ 1 \\ 0 \\ 0 \end{bmatrix}$$