¡Felicitaciones! ¡Aprobaste!

Calificación recibida 100 % **Para Aprobar** 100 % o más

Ir al siguiente elemento

1. Which vector is the orthogonal projection of $\mathrm{v} = \begin{pmatrix} 0 \\ 0 \\ 1 \end{pmatrix}$ onto $W = \mathrm{span}\left\{ \begin{pmatrix} 0 \\ 1 \\ -1 \end{pmatrix}, \begin{pmatrix} -2 \\ 1 \\ 1 \end{pmatrix} \right\}$? **1 / 1 punto**

- $\frac{1}{3}\begin{pmatrix} 1 \\ 1 \\ -2 \end{pmatrix}$
- ◉ $\frac{1}{3}\begin{pmatrix} -1 \\ -1 \\ 2 \end{pmatrix}$
- $\frac{1}{3}\begin{pmatrix} 2 \\ -1 \\ -1 \end{pmatrix}$
- $\frac{1}{3}\begin{pmatrix} -2 \\ 1 \\ 1 \end{pmatrix}$

Correcto

2. Suppose we have data points given by $(x_n, y_n) = (1,1), (2,1)$, and $(3,3)$. If the data is to be fit by the line $y = \beta_0 + \beta_1 x$, which is the overdetermined equation for β_0 and β_1? **1 / 1 punto**

- $\begin{pmatrix} 1 & 1 \\ 1 & 1 \\ 3 & 1 \end{pmatrix} \begin{pmatrix} \beta_0 \\ \beta_1 \end{pmatrix} = \begin{pmatrix} 1 \\ 2 \\ 3 \end{pmatrix}$
- $\begin{pmatrix} 1 & 1 \\ 2 & 1 \\ 3 & 1 \end{pmatrix} \begin{pmatrix} \beta_0 \\ \beta_1 \end{pmatrix} = \begin{pmatrix} 1 \\ 1 \\ 3 \end{pmatrix}$
- $\begin{pmatrix} 1 & 1 \\ 1 & 1 \\ 1 & 3 \end{pmatrix} \begin{pmatrix} \beta_0 \\ \beta_1 \end{pmatrix} = \begin{pmatrix} 1 \\ 2 \\ 3 \end{pmatrix}$
- ◉ $\begin{pmatrix} 1 & 1 \\ 1 & 2 \\ 1 & 3 \end{pmatrix} \begin{pmatrix} \beta_0 \\ \beta_1 \end{pmatrix} = \begin{pmatrix} 1 \\ 1 \\ 3 \end{pmatrix}$

Correcto

3. Suppose we have data points given by $(x_n, y_n) = (1, 1), (2, 1)$, and $(3, 3)$. Which is the best fit line to the data? 1 / 1 punto

- ○ $y = \frac{1}{3} + x$
- ◉ $y = -\frac{1}{3} + x$
- ○ $y = 1 + \frac{1}{3}x$
- ○ $y = 1 - \frac{1}{3}x$

✓ Correcto