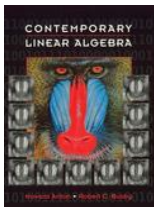


Chapter 2, Section 1 of *Contemporary Linear Algebra* by Anton and Busby



Next Page

1. Which of the following is a solution of the system

$$x - 2y + z = 1$$

$$2x + y - z = -4$$

$$4x - 3y + z = -2?$$

- ▶ A (1, 0, 0)
- ▶ B (-1, 0, 2)
- ▶ C (4, -3, 1)
- ▶ D (0, 0, 1)
- ▶ E (1, -4, -2)

Next Question

2. Find T , given that T is obtained from S by adding three times row 3 of S to row 1 of S , where

$$S = \begin{bmatrix} -1 & 2 \\ 4 & 1 \\ -1 & 5 \end{bmatrix}.$$

▶ A $\begin{bmatrix} -1 & 2 \\ 4 & 1 \\ -3 & 15 \end{bmatrix}$

▶ B $\begin{bmatrix} -4 & 17 \\ 4 & 1 \\ -3 & 15 \end{bmatrix}$

▶ C $\begin{bmatrix} -1 & 2 \\ 4 & 1 \\ -4 & 11 \end{bmatrix}$

▶ D $\begin{bmatrix} -4 & 17 \\ 4 & 1 \\ -1 & 5 \end{bmatrix}$

▶ E $\begin{bmatrix} -3 & 6 \\ 4 & 1 \end{bmatrix}$

3. For what value of k does the system

$$\begin{aligned}x - ky + z &= 0 \\2x + y + 2z &= 11\end{aligned}$$

have no solution?

- ▶ A -2
- ▶ B $-1/2$
- ▶ C 0
- ▶ D $1/2$
- ▶ E 2

Next Question

4. If $x + y + z = 8$ and $2x - 3y + z = 2$ then

▶ A $x = y$

▶ B $x = 3 + 2y$

▶ C $x = 2y - 3$

▶ D $x = 3 - 2y$

▶ E $x = 4y - 6$

Next Question

5. Which system of equations describes the following problem: Find a list of three numbers, adding to fifteen, such that each number (except the first) is three more than the sum of the previous numbers in the list.

- ▶ A $x + y + z = 15$ $-x + y = 3$ $-x - y + z = 3$
- ▶ B $x + y + z = 15$ $3x + y = 15$ $3x + 3y + z = 15$
- ▶ C $x + y + z = 15$ $3x - y = 0$ $3x + 3y - z = 3$
- ▶ D $x + y + z = 15$ $x - 3y = 0$ $x + y - 3z = 0$
- ▶ E $x + y + z = 15$ $x - y = 3$ $x + y - z = 6$

No more questions



RIGHT!

Back



Wrong...try again

Back