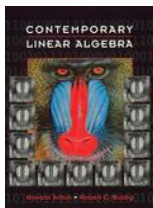


Chapter 4 , Section 2 of *Contemporary Linear Algebra* by Anton and Busby



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1. If

$$\begin{pmatrix} a & b & c \\ d & e & f \\ g & h & i \end{pmatrix} = 7 \quad \text{what is} \quad \begin{pmatrix} 2a & 2c & 2b \\ d & f & e \\ g & i & h \end{pmatrix}?$$

- ▶ A -14
- ▶ B -7
- ▶ C $-7/2$
- ▶ D $7/2$
- ▶ E 7

Next Question

2. Find the determinant of

$$\begin{pmatrix} 1 & -1 & 10 & 5 \\ 0 & 0 & -5 & 8 \\ 0 & 4 & -11 & 28 \\ 0 & 0 & 0 & 3 \end{pmatrix}$$

- A -60
- B -4
- C 0
- D 4
- E 60

Next Question

3. If P and Q are 3×3 matrices such that $\det(P) = 5$ and $\det(Q) = 4$ then $\det(2PQ^{-1})$ is

- ▶ A 0
- ▶ B $5/2$
- ▶ C 10
- ▶ D 20
- ▶ E 160

Next Question

4. Let $A = (a_{ij})$ be the 5×5 matrix with $a_{ij} = -1$ when $i = j$ and $a_{ij} = 1$ when $i \neq j$. Find $\det(A)$.

- ▶ A -48
- ▶ B -12
- ▶ C 0
- ▶ D 12
- ▶ E 48

Next Question

5. Matrix M is obtained from the 6×6 matrix N by the following sequence of row operations:

- ▶ interchange rows 1 and 4
- ▶ add -4 times row 1 to row 3
- ▶ multiply row 2 by $-1/5$
- ▶ add 3 times row 2 to row 5

Then $\det(M) = k \det(N)$ where k is

- ▶ A $-12/5$
- ▶ B $-1/5$
- ▶ C $1/5$
- ▶ D 5
- ▶ E $12/5$

No more questions



RIGHT!

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Wrong...try again

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