

CHAPTER
4 **Section B**

Quiz

Select the best answer.

- Find the determinant of $\begin{bmatrix} -6 & -6 \\ 5 & 4 \end{bmatrix}$.
A -54 **C** 6
B -6 **D** 54
- Find the determinant of $\begin{bmatrix} 1 & -1 & 1 \\ -1 & 1 & -1 \\ 1 & -1 & 1 \end{bmatrix}$.
F -1 **H** 1
G 0 **J** 2
- What are the solutions of the system $\begin{cases} a_1x + b_1y = c_1 \\ a_2x + b_2y = c_2 \end{cases}$?
A $x = \frac{\begin{vmatrix} a_1 & c_1 \\ a_2 & c_2 \end{vmatrix}}{\begin{vmatrix} a_1 & b_1 \\ a_2 & b_2 \end{vmatrix}}, y = \frac{\begin{vmatrix} c_1 & b_1 \\ c_2 & b_2 \end{vmatrix}}{\begin{vmatrix} a_1 & b_1 \\ a_2 & b_2 \end{vmatrix}}$
B $x = \frac{\begin{vmatrix} a_1 & c_1 \\ a_2 & c_2 \end{vmatrix}}{\begin{vmatrix} a_1 & b_1 \\ a_2 & b_2 \end{vmatrix}}, y = -\frac{\begin{vmatrix} c_1 & b_1 \\ c_2 & b_2 \end{vmatrix}}{\begin{vmatrix} a_1 & b_1 \\ a_2 & b_2 \end{vmatrix}}$
C $x = \frac{\begin{vmatrix} c_1 & b_1 \\ c_2 & b_2 \end{vmatrix}}{\begin{vmatrix} a_1 & b_1 \\ a_2 & b_2 \end{vmatrix}}, y = \frac{\begin{vmatrix} a_1 & c_1 \\ a_2 & c_2 \end{vmatrix}}{\begin{vmatrix} a_1 & b_1 \\ a_2 & b_2 \end{vmatrix}}$
D $x = \frac{\begin{vmatrix} c_1 & b_1 \\ c_2 & b_2 \end{vmatrix}}{\begin{vmatrix} a_1 & b_1 \\ a_2 & b_2 \end{vmatrix}}, y = -\frac{\begin{vmatrix} a_1 & c_1 \\ a_2 & c_2 \end{vmatrix}}{\begin{vmatrix} a_1 & b_1 \\ a_2 & b_2 \end{vmatrix}}$
- Which matrix has an inverse?
F $\begin{bmatrix} -2 & -1 \\ -1 & -0.5 \end{bmatrix}$ **H** $\begin{bmatrix} -2 & 1 \\ -1 & 0.5 \end{bmatrix}$
G $\begin{bmatrix} -2 & -1 \\ -1 & 0.5 \end{bmatrix}$ **J** $\begin{bmatrix} 2 & -1 \\ -1 & 0.5 \end{bmatrix}$
- Which matrix is the inverse of $\begin{bmatrix} -2 & -3 \\ 2 & 4 \end{bmatrix}$?
A $-\frac{1}{2}\begin{bmatrix} 4 & -3 \\ 2 & -2 \end{bmatrix}$ **C** $-\frac{1}{2}\begin{bmatrix} 4 & 2 \\ -3 & -2 \end{bmatrix}$
B $-\frac{1}{2}\begin{bmatrix} 2 & 2 \\ -3 & 4 \end{bmatrix}$ **D** $\begin{bmatrix} -2 & -1.5 \\ -1 & 1 \end{bmatrix}$

- What is the augmented matrix for the system $\begin{cases} 2y - 3x = 5 \\ -x - 8 = 3y \end{cases}$?
F $\begin{bmatrix} -3 & 2 & 5 \\ -1 & -8 & 3 \end{bmatrix}$ **H** $\begin{bmatrix} 2 & -3 & 5 \\ -1 & -8 & 3 \end{bmatrix}$
G $\begin{bmatrix} -3 & 2 & 5 \\ 1 & 3 & -8 \end{bmatrix}$ **J** $\begin{bmatrix} 2 & -3 & 5 \\ 1 & 3 & -8 \end{bmatrix}$

- What is $\begin{bmatrix} 9 & 3 & -18 \\ 1 & 2 & 8 \end{bmatrix}$ in reduced row-echelon form?

- A** $\begin{bmatrix} 0 & 0 & -4 \\ 0 & 0 & 6 \end{bmatrix}$ **C** $\begin{bmatrix} 9 & 0 & -36 \\ 0 & 1 & 6 \end{bmatrix}$
B $\begin{bmatrix} 1 & 0 & -4 \\ 0 & 1 & 6 \end{bmatrix}$ **D** $\begin{bmatrix} 9 & 3 & -18 \\ 0 & 1 & 6 \end{bmatrix}$

- The chart below shows the first, second, and third place finishes of three competitors during a week-long track and field event. How many points are awarded for a first, second, and third place finish?

	First	Second	Third	Total
Adams	8	3	4	72
Bonito	6	6	5	75
Chang	5	7	6	76

- F** 6 for first, 4 for second, 3 for third
G 6 for first, 5 for second, 2 for third
H 7 for first, 3 for second, 2 for third
J 7 for first, 4 for second, 1 for third

Answer Key continued

- 33. D
- 34. J
- 35. C
- 36. F
- 37. B
- 38. H
- 39. D
- 40. H
- 41. A
- 42. H

CHAPTER 4

Section Quiz: Section A

- 1. A
- 2. J
- 3. A
- 4. J
- 5. B
- 6. H
- 7. B
- 8. H

Section Quiz: Section B

- 1. C
- 2. G
- 3. C
- 4. G
- 5. D
- 6. G
- 7. B
- 8. F

Chapter Test Form A

- 1. A
- 2. B

- 3. D
- 4. A
- 5. D
- 6. B
- 7. A
- 8. A
- 9. C
- 10. A
- 11. D
- 12. A
- 13. B
- 14. B
- 15. D
- 16. B

Chapter Test Form B

- 1. A
- 2. H
- 3. A
- 4. G
- 5. D
- 6. G
- 7. A
- 8. G
- 9. D
- 10. F
- 11. D
- 12. H
- 13. A
- 14. F
- 15. B
- 16. G