Task card 1 Inverse Matrices & Cramer's Rule

Find the inverse of $\begin{bmatrix} 1 & 0 \\ -2 & -1 \end{bmatrix}$.

Task card 2 Inverse Matrices & Cramer's Rule

For the system $-7x + 7y = 7$ and $-9x + 8y = 13$, use Cramer's rule to solve the system. Write (x, y).

Task card 3 Inverse Matrices & Cramer's Rule

Find the inverse of $\begin{bmatrix} 1 & -2 \\ 3 & -5 \end{bmatrix}$.

Task card 4 Inverse Matrices & Cramer's Rule

Find k so that $\begin{bmatrix} k & -3 \\ 4 & -4 \end{bmatrix}$ has no inverse.

Task card 5 Inverse Matrices & Cramer's Rule

Find the inverse of $\begin{bmatrix} 2 & 7 \\ -3 & -10 \end{bmatrix}$.

Task card 6 Inverse Matrices & Cramer's Rule

For the system $-7x + 3y = -37$ and $-8x - 2y = -26$, use Cramer's rule to solve the system. Write (x, y).

Task card 7 Inverse Matrices & Cramer's Rule

Find the inverse of $\begin{bmatrix} -4 & 3 \\ -7 & 5 \end{bmatrix}$.

Task card 8 Inverse Matrices & Cramer's Rule

Find k so that $\begin{bmatrix} k & 7 \\ -3 & 1 \end{bmatrix}$ has no inverse.

Task card 9 Inverse Matrices & Cramer's Rule

Find the inverse of $\begin{bmatrix} 4 & 7 \\ 1 & 2 \end{bmatrix}$.

Task card 10 Inverse Matrices & Cramer's Rule

For the system $-8x + y = 12$ and $-x - 3y = 14$, use Cramer's rule to find y.

Task card 11 Inverse Matrices & Cramer's Rule

Find the inverse of $\begin{bmatrix} -7 & 2 \\ 3 & -1 \end{bmatrix}$.

Task card 12 Inverse Matrices & Cramer's Rule

Find k so that $\begin{bmatrix} k & 6 \\ -7 & 3 \end{bmatrix}$ has no inverse.

Task card 13 Inverse Matrices & Cramer's Rule

Find the inverse of $\begin{bmatrix} -3 & -2 \\ -5 & -3 \end{bmatrix}$.

Task card 14 Inverse Matrices & Cramer's Rule

For the system $-8x - 3y = 20$ and $8x - y = -4$, use Cramer's rule to find y.

Task card 15 Inverse Matrices & Cramer's Rule

Find the inverse of $\begin{bmatrix} 9 & -8 \\ 8 & -7 \end{bmatrix}$.

Task card 16 Inverse Matrices & Cramer's Rule

Find k so that $\begin{bmatrix} k & -9 \\ 9 & 3 \end{bmatrix}$ has no inverse.

Task card 17 Inverse Matrices & Cramer's Rule

Find the inverse of $\begin{bmatrix} 2 & 9 \\ -1 & -5 \end{bmatrix}$.

Task card 18 Inverse Matrices & Cramer's Rule

For the system $3x - 2y = 18$ and $3x + 3y = -12$, use Cramer's rule to find x.

Task card 19 Inverse Matrices & Cramer's Rule

Find the inverse of $\begin{bmatrix} 6 & 5 \\ 7 & 6 \end{bmatrix}$.

Task card 20 Inverse Matrices & Cramer's Rule

Find k so that $\begin{bmatrix} k & 6 \\ -3 & -9 \end{bmatrix}$ has no inverse.

Task card 21 Inverse Matrices & Cramer's Rule

Find the inverse of $\begin{bmatrix} -1 & 4 \\ -1 & 3 \end{bmatrix}$.

Task card 22 Inverse Matrices & Cramer's Rule

For the system $x - 8y = 44$ and $-5x - 5y = 5$, use Cramer's rule to solve the system. Write (x, y).

Task card 23 Inverse Matrices & Cramer's Rule

Find the inverse of $\begin{bmatrix} 3 & -5 \\ 1 & -2 \end{bmatrix}$.

Task card 24 Inverse Matrices & Cramer's Rule

Find k so that $\begin{bmatrix} k & -3 \\ 3 & -9 \end{bmatrix}$ has no inverse.

Inverse Matrices & Cramer's Rule Task Cards

Recording sheet · Grade 12 · Solve each problem. For a matrix answer, write one number in each box. Write solutions of systems as (x, y).

Name: _____ Date: _____

Scan to check your answers

1	2	3	4
5	6	7	8
9	10	11	12
13	14	15	16
17	18	19	20
21	22	23	24

Inverse Matrices & Cramer's Rule Task Cards: Answer Key

Grade 12 · Hard

The answers online

1. $\begin{bmatrix} 1 & 0 \\ -2 & -1 \end{bmatrix}$

2. (-5, -4)

3. $\begin{bmatrix} -5 & 2 \\ -3 & 1 \end{bmatrix}$

4. k = 3

5. $\begin{bmatrix} -10 & -7 \\ 3 & 2 \end{bmatrix}$

6. (4, -3)

7. $\begin{bmatrix} 5 & -3 \\ 7 & -4 \end{bmatrix}$

8. k = -21

9. $\begin{bmatrix} 2 & -7 \\ -1 & 4 \end{bmatrix}$

10. y = -4

11. $\begin{bmatrix} -1 & -2 \\ -3 & -7 \end{bmatrix}$

12. k = -14

13. $\begin{bmatrix} 3 & -2 \\ -5 & 3 \end{bmatrix}$

14. y = -4

15. $\begin{bmatrix} -7 & 8 \\ -8 & 9 \end{bmatrix}$

16. k = -27

17. $\begin{bmatrix} 5 & 9 \\ -1 & -2 \end{bmatrix}$

18. x = 2

19. $\begin{bmatrix} 6 & -5 \\ -7 & 6 \end{bmatrix}$

20. k = 2

21. $\begin{bmatrix} 3 & -4 \\ 1 & -1 \end{bmatrix}$

22. (4, -5)

23. $\begin{bmatrix} 2 & -5 \\ 1 & -3 \end{bmatrix}$

24. k = 1