Task card 1 Inverse Matrices & Cramer's Rule

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

Task card 2 Inverse Matrices & Cramer's Rule

For the system -x - 4y = 2 and -4x + 3y = 27, use Cramer's rule to find y.

Task card 3 Inverse Matrices & Cramer's Rule

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

Task card 4 Inverse Matrices & Cramer's Rule

For the system 3x + 4y = -4 and -4x + 3y = 22, use Cramer's rule to find x.

Task card 5 Inverse Matrices & Cramer's Rule

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

Task card 6 Inverse Matrices & Cramer's Rule

For the system -x - 2y = 4 and 3x + 3y = -6, use Cramer's rule to find x.

Task card 7 Inverse Matrices & Cramer's Rule

Find the inverse of $\begin{bmatrix} 3 & -1 \\ 1 & 0 \end{bmatrix}$.

Task card 8 Inverse Matrices & Cramer's Rule

For the system -2x - 3y = 21 and -x + y = -2, find Dx (replace the x-column with the constants).

Task card 9 Inverse Matrices & Cramer's Rule

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

Task card 10 Inverse Matrices & Cramer's Rule

For the system -2x - y = -3 and 3x + 5y = -6, use Cramer's rule to find y.

Task card 11 Inverse Matrices & Cramer's Rule

Find the inverse of $\begin{bmatrix} -2 & -3 \\ -5 & -7 \end{bmatrix}$.

Task card 12 Inverse Matrices & Cramer's Rule

For the system 5x + 3y = 45 and -2x + y = -7, use Cramer's rule to find x.

Task card 13 Inverse Matrices & Cramer's Rule

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

Task card 14 Inverse Matrices & Cramer's Rule

For the system $x - 4y = 7$ and $-5x + 3y = -18$, find the determinant D of the coefficient matrix.

Task card 15 Inverse Matrices & Cramer's Rule

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

Task card 16 Inverse Matrices & Cramer's Rule

For the system $4x - y = -14$ and $2x + 2y = 8$, find Dy (replace the y-column with the constants).

Task card 17 Inverse Matrices & Cramer's Rule

Find the inverse of $\begin{bmatrix} 6 & 1 \\ -5 & -1 \end{bmatrix}$.

Task card 18 Inverse Matrices & Cramer's Rule

For the system $-4x + 5y = 14$ and $2x - 2y = -6$, use Cramer's rule to find x.

Task card 19 Inverse Matrices & Cramer's Rule

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

Task card 20 Inverse Matrices & Cramer's Rule

Find k so that $\begin{bmatrix} k & -4 \\ -4 & 2 \end{bmatrix}$ has no inverse.

Task card 21 Inverse Matrices & Cramer's Rule

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

Task card 22 Inverse Matrices & Cramer's Rule

For the system $4x - 2y = 6$ and $2x + 5y = 33$, find the determinant D of the coefficient matrix.

Task card 23 Inverse Matrices & Cramer's Rule

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

Task card 24 Inverse Matrices & Cramer's Rule

Find k so that $\begin{bmatrix} k & -6 \\ 6 & 1 \end{bmatrix}$ 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 · Easy

The answers online

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

2. y = 1

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

4. x = -4

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

6. x = 0

7. $\begin{bmatrix} 0 & 1 \\ -1 & 3 \end{bmatrix}$

8. 15

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

10. y = -3

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

12. x = 6

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

14. -17

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

16. 60

17. $\begin{bmatrix} 1 & 1 \\ -5 & -6 \end{bmatrix}$

18. x = -1

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

20. k = 8

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

22. 24

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

24. k = -36