Question **14**

Not yet answered

Marked out of 8.00

Flag question

$$r_2' = r_2 + r_1$$

$$\begin{bmatrix} 1 & -1 & 1 & 3 \\ -1 & 1 & 2 & 0 \\ 1 & 2 & 3 & 1 \end{bmatrix} \rightarrow \begin{bmatrix} 1 & -1 & 1 & 3 \\ p & q & r & s \\ a & b & c & d \end{bmatrix}$$

$$r_3' = r_3 - r_1$$

Find the values of the second matrix, after carrying out the above raw operations.

Answer for p Choose...

Answer for q Choose...

Answer for r Choose...

Answer for s Choose...

Answer for a Choose...

Answer for b Choose...

Answer for c Choose...

Quiz na

1 2 3

8 9 10

15 16 17

22 23 24

29 30 31

Finish attempt ...

Time left 0:58:53

Question 3

Not yet answered

Marked out of 3.00

Flag question

Consider the following system of linear equations.

$$x + y + z = 4$$

$$x + y + 4z = 1$$

$$x - y - z = 2$$

Represent the above equations in $A\underline{x} = \underline{b}$ form.

Assume that you solve this using Cramer's Rule.

Then $z = \dfrac{|A_3|}{|A|}$

Answer for $|A_3|$ Choose...

Answer for $|A|$ Choose...

Answer for z Choose...

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Flag question

$$r_2' = r_2 + r_1$$

$$\begin{bmatrix} 1 & 1 & 0 & 2 \\ -1 & 2 & 1 & 4 \\ 2 & 1 & -1 & -2 \end{bmatrix} \rightarrow \begin{bmatrix} 1 & 1 & 0 & 2 \\ p & q & r & s \\ a & b & c & d \end{bmatrix}$$

$$r_3' = r_3 - 2r_1$$

Find the values of the second matrix, after carrying out the above raw operations.

Answer for p Choose...

Answer for q Choose...

Answer for r Choose...

Answer for s Choose...

Answer for a Choose...

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estion

Let A be a 2x2 matrix. Find B= A^2+2A

Let

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

Let

$$B = \begin{bmatrix} a & b \\ c & d \end{bmatrix}$$

Answer for a = : 5

Answer for b = : 0

Answer for c = : 0

Answer for d = : 3

3

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estion

Find the determinant of A.

$$A = \begin{bmatrix} 5 & 7 & 8 \\ 6 & 5 & -4 \\ 3 & 4 & 6 \end{bmatrix}$$

Answer:

n 2
answered
out of
question

Consider the following system of linear equations.

$$x + y + z = 4$$
$$x + y + 4z = 1$$
$$x - y - z = 2$$

Represent the above equations in $A\underline{x} = \underline{b}$ form.

Assume that you solve this using Cramer's Rule.

Then $x = \dfrac{|A_1|}{|A|}$

Answer for $|A_1|$ 18

Answer for $|A|$ 6

Answer for x 3

Consider the following system of linear equations.

$$3x + 4y = -7$$

$$2x - 3y = 18$$

Represent the above equations in $A\underline{x} = \underline{b}$ form.

Find $|A|$.

Find $adj\ A$

Let $\quad adj\ A = \begin{bmatrix} a & b \\ c & d \end{bmatrix}$

Find x and y.

Answer for |A| Choose...

Answer for a Choose...

Answer for b Choose...

Answer for c Choose...

Answer for d Choose...

Answer for x

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stion

Consider the following linear system of equations.

$$x + y - z = -3$$

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

$$x + 2y + az = 1$$

Find the value of **a** if the above system of equations have no solution.

Answer:

Consider the following linear system of equations.

$$2x + y + az = 3$$

$$x + y + z = 1$$

$$x + 2y + 2z = 0$$

Find the value of **a** if the above system of equations have infinite number of solutions.

Answer:

Next page

Let A be a 2x2 matrix. Find $B = A^2 + 2A$

Let

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

Let

$$B = \begin{bmatrix} a & b \\ c & d \end{bmatrix}$$

Answer for a = : -7

Answer for b = : -2

Answer for c = : 6

Answer for d = : -10

Question **2**

Not yet answered

Marked out of 7.00

Flag question

Consider the following system of linear equations.

$$4x + 3y = 14$$

$$3x - 2y = 19$$

Represent the above equations in $A\underline{x} = \underline{b}$ form.

Find $|A|$.

Find $adj\ A$

Let $\quad adj\ A = \begin{bmatrix} a & b \\ c & d \end{bmatrix}$

Find x and y.

Answer for |A| Choose...

Answer for *a* Choose...

Answer for *b* Choose...

Answer for *c* Choose...

Answer for *d* Choose...

Answer for *x* Choose...

Answer for *y* Choose...

Question 1

Not yet answered

Marked out of 5.00

Flag question

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

Find the determinant of the above matrix.:

Find the inverse of the matrix A. $A^{-1} = \begin{bmatrix} a & b \\ c & d \end{bmatrix}$

a = :

b = :

c = :

d = :

(Write your answer with three decimal place)

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Question 15

Not yet answered

Marked out of 0.20

Flag question

Find the values of the resulting matrix.

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

$$\downarrow$$

$$\begin{bmatrix} 1 & 0 & 0 & 1 & 1 & 0 \\ 0 & 1 & 0 & a & b & c \\ 0 & 0 & 1 & d & e & f \end{bmatrix}$$

a = Choose...

b = Choose...

c = Choose...

d = Choose...

e = Choose...

f = Choose...

Question **14**

Not yet answered

Marked out of 5.00

Flag question

Assume A is a symmetric Matrix.

$$A = \begin{bmatrix} -1 & 0 & 2 & 1 \\ a & 4 & 3 & d \\ b & e & 0 & 3 \\ c & -2 & 3 & 2 \end{bmatrix}$$

a = Choose...

b = Choose...

C = Choose...

d = Choose...

e = Choose...

Question **13**

Not yet answered

Marked out of 9.00

Flag question

If |A| = 128 then find the cofactor matrix of A.

$$A = \begin{bmatrix} x & 5 & 7 \\ 2 & 4 & 1 \\ -2 & 8 & 3 \end{bmatrix}$$

C_{11} Choose...

C_{12} Choose...

C_{13} Choose...

C_{21} Choose...

C_{22} Choose...

Find the values of the resulting matrix.

$$\begin{bmatrix} 1 & 1 & 0 & 1 & 0 & 1 \\ 0 & 1 & 0 & -1 & 1 & 0 \\ 0 & 0 & 2 & 4 & 2 & 8 \end{bmatrix}$$

$$\downarrow$$

$$\begin{bmatrix} 1 & 0 & 0 & a & b & c \\ 0 & 1 & 0 & -1 & 1 & 0 \\ 0 & 0 & 1 & d & e & f \end{bmatrix}$$

a = Choose...

b = Choose...

c = Choose...

d = Choose...

e = Choose...

f = Choose...

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21
answered
out of
question

If |A| = 128 then find the cofactor matrix of A.

$$A = \begin{bmatrix} x & 5 & 7 \\ 2 & 4 & 1 \\ -2 & 8 & 3 \end{bmatrix}$$

C_{11} Choose...

C_{12} Choose...

C_{13} Choose...

C_{21} Choose...

C_{22} Choose...

C_{23} Choose...

Question 20

Not yet answered

Marked out of 6.00

Flag question

Find the values of the resulting matrix.

$$\begin{bmatrix} 1 & 0 & 0 & 1 & 1 & -1 \\ -1 & 1 & -1 & 2 & 1 & 0 \\ 0 & 0 & 1 & 3 & 2 & -1 \end{bmatrix}$$

$$\downarrow$$

$$\begin{bmatrix} 1 & 0 & 0 & 1 & 1 & -1 \\ 0 & 1 & 0 & a & b & c \\ 0 & 0 & 1 & d & e & f \end{bmatrix}$$

a = Choose...

b = Choose...

C = Choose...

d = Choose...

e = Choose...

f = Choose...

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tion

Consider the following system of linear equations.

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

$$2x + y + 2z = 0$$

$$x - y - 2z = -6$$

Represent the above equations in $A\underline{x} = \underline{b}$ form.

Assume that you solve this using Cramer's Rule.

Then $x = \dfrac{|A_1|}{|A|}$

Answer for $|A_1|$ Choose...

Answer for $|A|$ Choose...

Let $A = \begin{bmatrix} -1 & 2 \\ 4 & 3 \end{bmatrix}$, $B = \begin{bmatrix} -1 & 0 \\ 6 & -2 \end{bmatrix}$

Find $A^2 - 3B + 3A^T$

Let $A^2 - 3B + 3A^T = \begin{bmatrix} a_{11} & a_{12} \\ a_{21} & a_{22} \end{bmatrix}$

Answer for a_{11} 9

Answer for a_{12} 16

Answer for a_{21} -4

Answer for a_{22} 32

If |A| = 128 then find the cofactor matrix of A.

$$A = \begin{bmatrix} x & 5 & 7 \\ 2 & 4 & 1 \\ -2 & 8 & 3 \end{bmatrix}$$

C_{11} Choose...

C_{12} Choose...

C_{13} Choose...

C_{21} Choose...

C_{22} Choose...

Let $A = \begin{bmatrix} -1 & 2 \\ 4 & 3 \end{bmatrix}$, $B = \begin{bmatrix} -1 & 0 \\ 6 & -2 \end{bmatrix}$

Find $A^2 - 2B + 3I$

Let $A^2 - 2B + 3I = \begin{bmatrix} a_{11} & a_{12} \\ a_{21} & a_{22} \end{bmatrix}$

Answer for a_{11} Choose...

Answer for a_{12} Choose...

Answer for a_{21} Choose...

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ion

Following adjacency matrix represents an undirected graph.

$$\begin{bmatrix} 0 & 1 & 2 & 1 \\ 1 & 1 & 0 & 1 \\ 2 & 0 & 0 & 3 \\ 1 & 1 & 3 & 1 \end{bmatrix}$$

Find the following.

Number of loops	2
Number of edges	Choose...
Number of vertices	Choose...
Total degree	Choose...

Consider the following system of linear equations.

$$2x - 4y = -10$$

$$3x - 5y = -11$$

Represent the above equations in $A\underline{x} = \underline{b}$ form.

Find $|A|$.

Find $adj\ A$

Let $\quad adj\ A = \begin{bmatrix} a & b \\ c & d \end{bmatrix}$

Find x and y.

Answer for |A| Choose...

Answer for a Choose...

Answer for b Choose...

Answer for c Choose...

Answer for d Choose...

Answer for x Choose...

Answer for y Choose...

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$$A = \begin{bmatrix} 3 & 2 \\ 5 & 4 \end{bmatrix}$$

Find the determinant of the above matrix.:

Find the inverse of the matrix A. $A^{-1} = \begin{bmatrix} a & b \\ c & d \end{bmatrix}$

a = :

b = :

c = :

d = :

(Write your answer with one decimal place)

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Indicate whether following matrix operations are commut

Matrix Addition Choose...

Matrix Multiplication Choose...

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Consider the following system of linear equations.

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

$$2x + y + 2z = 0$$

$$x - y - 2z = -6$$

Represent the above equations in $A\underline{x} = \underline{b}$ form.

Assume that you solve this using Cramer's Rule.

Then $y = \frac{|A_2|}{|A|}$

Answer for $|A_2|$ Choose...

Answer for $|A|$ Choose...

Answer for y Choose...

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Simplify the following boolean expression.

$$ABC + \bar{A} + ABC$$

Select one:

- $(\bar{A} + C)$
- $A + \bar{C}$
- A
- $\bar{A}$
- None of the above

Let $A = \begin{bmatrix} -1 & 2 \\ 4 & 3 \end{bmatrix}, B = \begin{bmatrix} -1 & 0 \\ 6 & -2 \end{bmatrix}$

Find $A^2 + B^T - 2I$

Let $A^2 + B^T - 2I = \begin{bmatrix} a_{11} & a_{12} \\ a_{21} & a_{22} \end{bmatrix}$

Answer for a_{11} Choose...

Answer for a_{12} Choose...

Answer for a_{21} Choose...

Answer for a_{22} Choose...

Question 11

Not yet answered

Marked out of 9.00

Flag question

Let $A = \begin{bmatrix} 2 & 3 & -1 \\ 1 & 0 & 4 \\ 5 & 2 & 3 \end{bmatrix}$

and B=3A; C=B+2A-5I. Find matrix D such that D=2A+B-C

Assume I is the identity matrix.

$$D = \begin{bmatrix} a & b & c \\ d & e & f \\ g & h & i \end{bmatrix}$$

a = : 5

b = : 0

c = : 0

d = : 0

e = : 5

f = : 0

g = : 0

h = : 0

i = : 5

Moodle

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Question **6**

Not yet answered

Marked out of 9.00

Flag question

Let $A = \begin{bmatrix} 5 & -2 & 1 \\ 4 & 1 & 0 \\ 1 & -2 & 2 \end{bmatrix}$

and B=3A; C=B+2A-5I. Find matrix D such that D=2A+B-C.

Assume I is the identity matrix.

$$D = \begin{bmatrix} a & b & c \\ d & e & f \\ g & h & i \end{bmatrix}$$

a = :

b = :

c = :

d = :

e = :

f = :

g = :

h = :

i = :

Moodle

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Question 18

Not yet answered

Marked out of 4.00

Flag question

Let A be a 2x2 matrix. Find B= A^2+2A

Let

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

Let

$$B = \begin{bmatrix} a & b \\ c & d \end{bmatrix}$$

Answer for a = : -7

Answer for b = : 4

Answer for c = : -6

Answer for d = : -3

Question 7
Not yet answered
Marked out of
Flag question

Consider the following linear system of equations.

$$x - y - z = 0$$

$$x + 2y - z = 6$$

$$-2x + y + az = -5$$

Find the value of **a** if the above system of equations have no solution.

Answer:

Next page

Consider the following system of linear equations.

$$3x + 4y = 11$$

$$2x + 7y = 3$$

Represent the above equations in $A\underline{x} = \underline{b}$ form.

Find $|A|$.

Find $adj\ A$

Let $\quad adj\ A = \begin{bmatrix} a & b \\ c & d \end{bmatrix}$

Find x and y.

Answer for |A| 13

Answer for a Choose...

Answer for b Choose...

Answer for c Choose...

$$4x + 3y = 14$$

$$3x - 2y = 19$$

Represent the above equations in $A\underline{x} = \underline{b}$ form.

Find $|A|$.

Find $adj\ A$

Let $\quad adj\ A = \begin{bmatrix} a & b \\ c & d \end{bmatrix}$

Find x and y.

Answer for $|A|$ -17

Answer for a -2

Answer for b -3

Answer for c -3

Answer for d 4

Answer for x 5

Answer for y -3

Consider the following system of linear equations.

$$2x + 4y = 22$$

$$3x - 2y = 1$$

Represent the above equations in $A\underline{x} = \underline{b}$ form.

Find $|A|$.

Find the $adj\ A$

Let $\quad adj\ A = \begin{bmatrix} a & b \\ c & d \end{bmatrix}$

Find x and y.

Answer for $|A|$ Choose...

Answer for a Choose...

Answer for b Choose...

Answer for c Choose...

Answer for d Choose...

Answer for x Choose...

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out of

question

If |A| = 43 then find the cofactor matrix of A

$$A = \begin{bmatrix} 1 & 2 & 7 \\ 4 & -3 & x \\ 2 & 2 & 5 \end{bmatrix}$$

C_{11} -15

C_{12} -20

C_{13} 14

C_{21} 4

C_{22} -9

C_{23} 2

$$A = \begin{bmatrix} 3 & 2 \\ 5 & 4 \end{bmatrix}$$

Find the determinant of the above matrix.: 2

Find the inverse of the matrix A. $A^{-1} = \begin{bmatrix} a & b \\ c & d \end{bmatrix}$

a = : 4

b = : -2

c = : -5

d = : 3

(Write your answer with one decimal place)

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Solve for X.

$$X + \begin{bmatrix} -1 & 0 \\ 0 & 2 \end{bmatrix} = \begin{bmatrix} 2 & 6 \\ 1 & 5 \end{bmatrix} + \begin{bmatrix} -4 & -8 \\ -2 & 0 \end{bmatrix}$$

$$X = \begin{bmatrix} a_{11} & a_{12} \\ a_{21} & a_{22} \end{bmatrix}$$

Answer for a_{11} -1

Answer for a_{12} -2

Answer for a_{21} -1

Answer for a_{22} 3

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Flag question

Let A be a 2x2 matrix. Find B= A^2+2A

Let

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

Let

$$B = \begin{bmatrix} a & b \\ c & d \end{bmatrix}$$

Answer for a = :

Answer for b = :

Answer for c = :

Answer for d = :

Let $A = \begin{bmatrix} -1 & 2 \\ 4 & 3 \end{bmatrix}, B = \begin{bmatrix} -1 & 0 \\ 6 & -2 \end{bmatrix}$

Find $A^2 - 2AB - B^T$

Let $A^2 - 2AB - B^T = \begin{bmatrix} a_{11} & a_{12} \\ a_{21} & a_{22} \end{bmatrix}$

Answer for a_{11} Choose...

Answer for a_{12} Choose...

Answer for a_{21} Choose...

Answer for a_{22} Choose...

$$r_2' = r_2 + 2r_1$$

$$\begin{bmatrix} 1 & -1 & 3 & -4 \\ -2 & 2 & 1 & 0 \\ -1 & -1 & 0 & 2 \end{bmatrix} \rightarrow \begin{bmatrix} 1 & -1 & 3 & -4 \\ p & q & r & s \\ a & b & c & d \end{bmatrix}$$

$$r_3' = r_3 + r_1$$

Find the values of the second matrix, after carrying out

Answer for p Choose...

Answer for q Choose...

Answer for r Choose...

Answer for s Choose...

Answer for a Choose...

Answer for b Choose...

Answer for c Choose...

Answer for d

If |A| = -35 then find the cofactor matrix of A.

$$A = \begin{bmatrix} 1 & -2 & 2 \\ 3 & 4 & 5 \\ 2 & 1 & x \end{bmatrix}$$

C_{11} Choose...

C_{12} Choose...

C_{13} Choose...

C_{21} Choose...

C_{22} Choose...

C_{23} Choose...

C_{31} Choose...

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12

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out of

question

Find the values of the resulting matrix.

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

$$\downarrow$$

$$\begin{bmatrix} 1 & 0 & 0 & 1 & 0 & -1 \\ 0 & 1 & 0 & a & b & c \\ 0 & 0 & 1 & d & e & f \end{bmatrix}$$

a = Choose...

b = Choose...

C = Choose...

d = Choose...

e = Choose...

f = Choose...

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estion

Let $A = \begin{bmatrix} 4 & 3 & 1 \\ 5 & 0 & 6 \\ 5 & 2 & 3 \end{bmatrix}$

and B=3A; C=B+2A-5I. Find matrix D such that D=2A+B-C.

Assume I is the identity matrix.

$$D = \begin{bmatrix} a & b & c \\ d & e & f \\ g & h & i \end{bmatrix}$$

a = :

b = :

c = :

d = :

e = :

f = :

g = :

h = :

Euler path & circuit

path

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cover all edges

hamiltan path

* It should cover