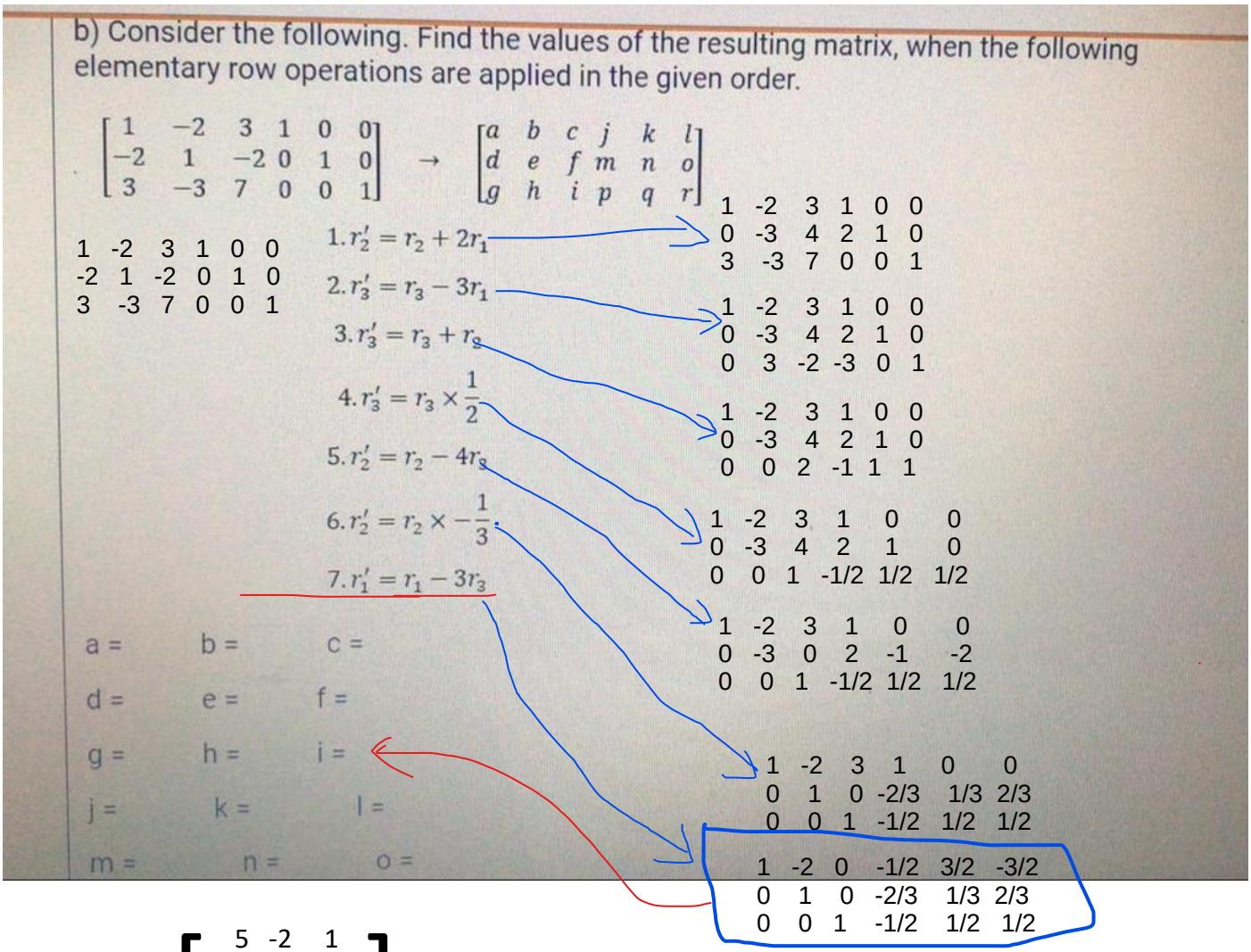
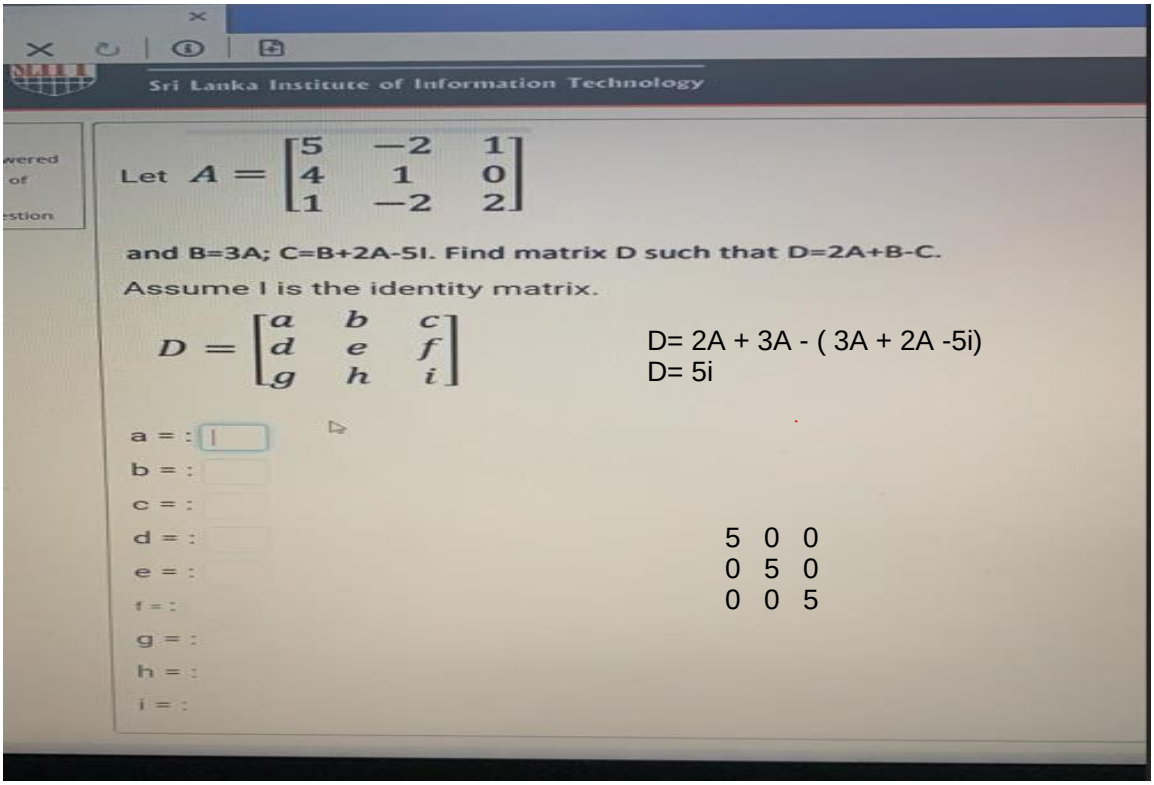
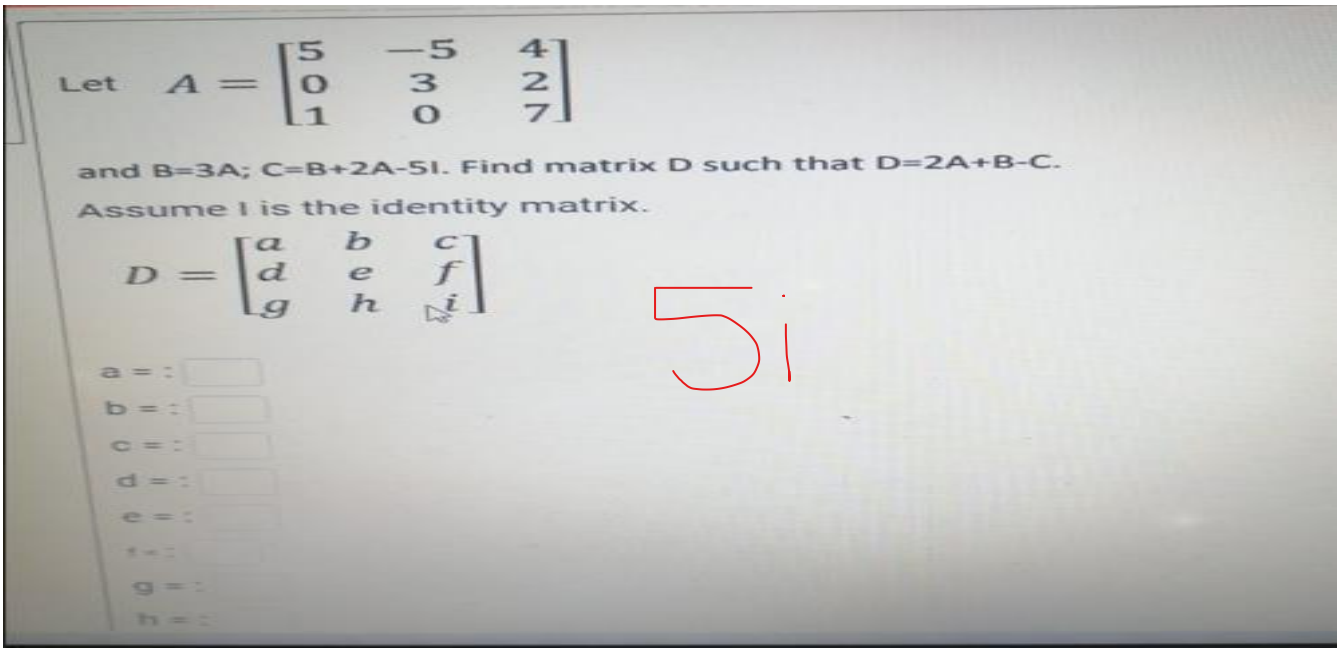
1. b) Consider the following.Find the values of the resulting matrix , when the following elementary row operation are applied in the given order.



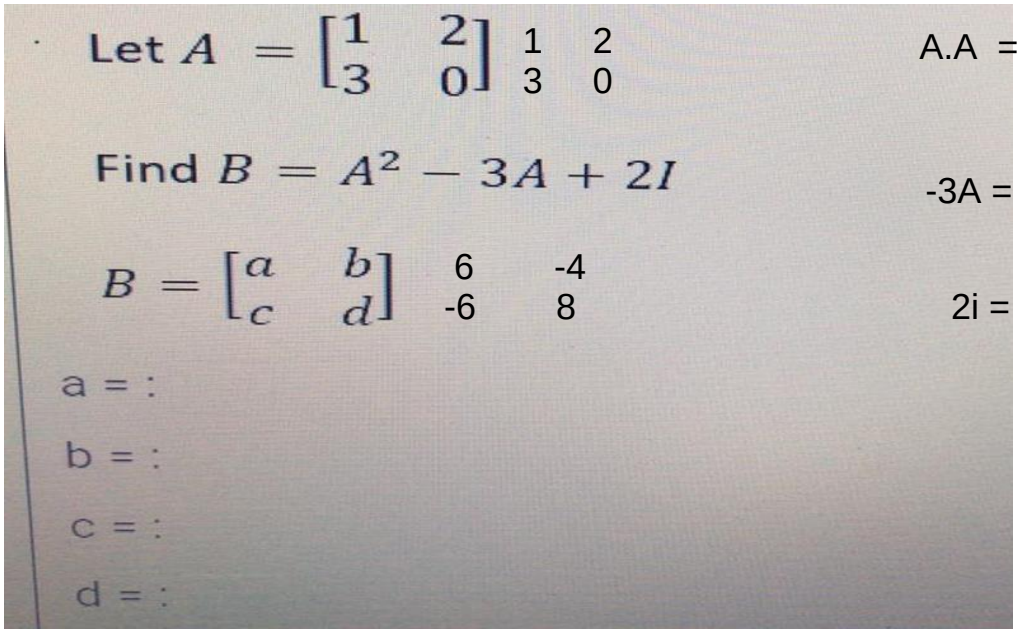

2. Let A= $\begin{bmatrix} 5 & -2 & 1 \\ 4 & 1 & 0 \\ 1 & -2 & 2 \end{bmatrix}$ and B=3A; C=B+2A-5I.Find matrix D such that D= 2A+B-C



3. Let A = $\begin{bmatrix} 5 & -5 & 4 \\ 0 & 3 & 2 \\ 1 & 0 & 7 \end{bmatrix}$ and B=3A; C=B+2A-5I.Find matrix D such that D= 2A+B-C




4. Let A = $\begin{bmatrix} 1 & 2 \\ 3 & 0 \end{bmatrix}$ Find B = $A^2$- 3A +2I



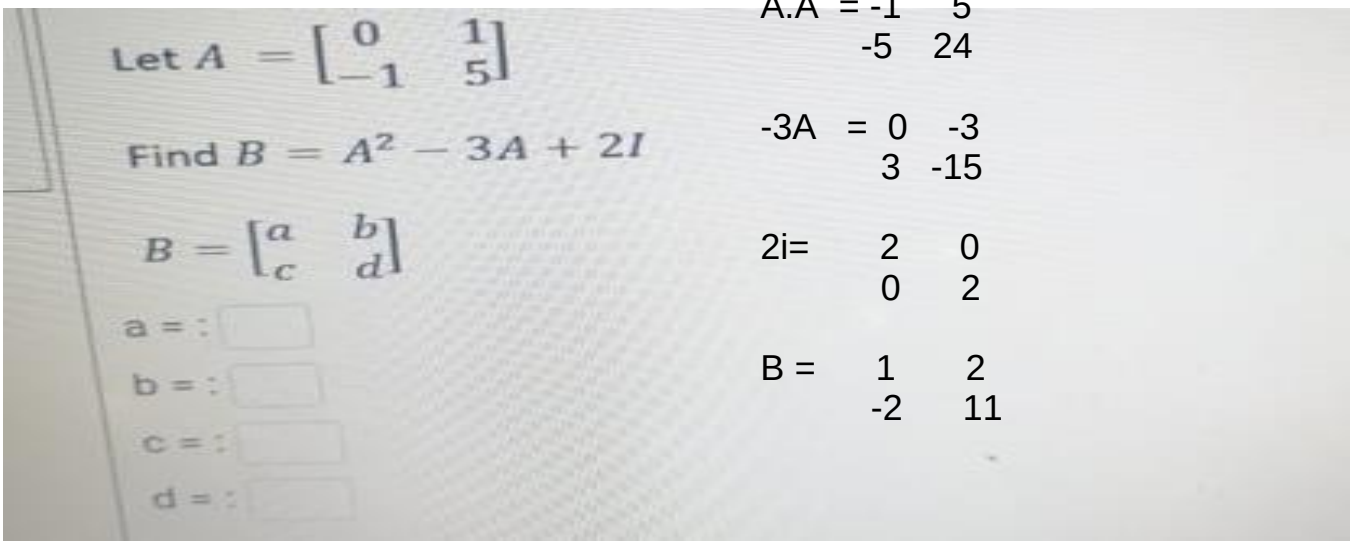

1 2
3 0

A.A = 7 2
3 6

-3A = -3 -6
-9 0

2i = 2 0
0 2

5. Let A = $\begin{bmatrix} 0 & 1 \\ -1 & 5 \end{bmatrix}$ Find B = $A^2$- 3A +2I



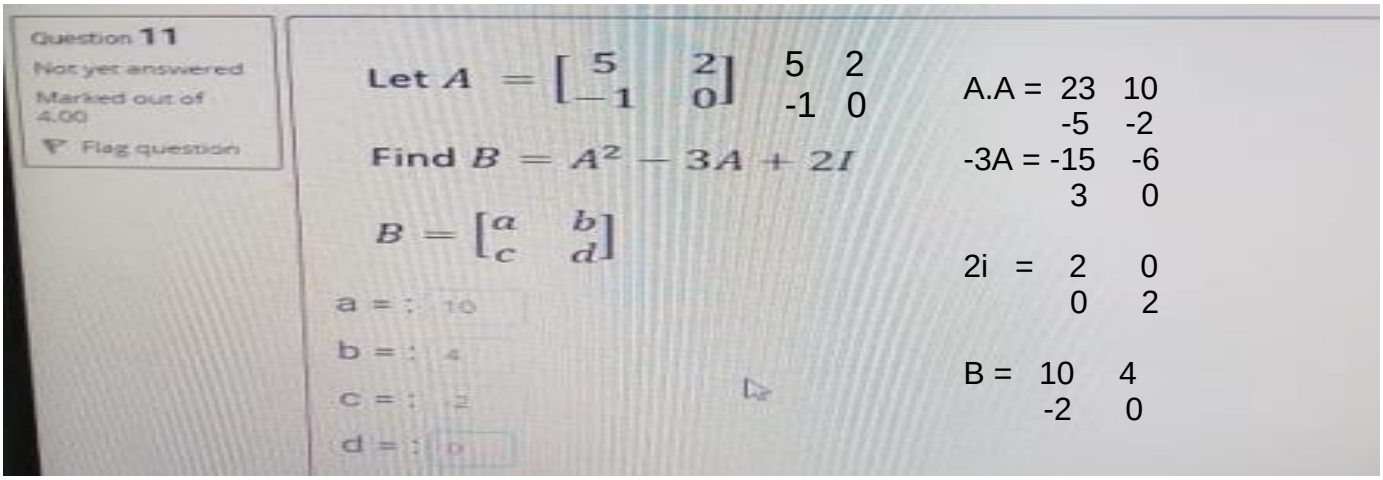

A.A = -1 5
-5 24

-3A = 0 -3
3 -15

2i= 2 0
0 2

B = 1 2
-2 11

6. Let A = $\begin{bmatrix} 5 & 2 \\ -1 & 0 \end{bmatrix}$ Find B = $A^2$- 3A +2I



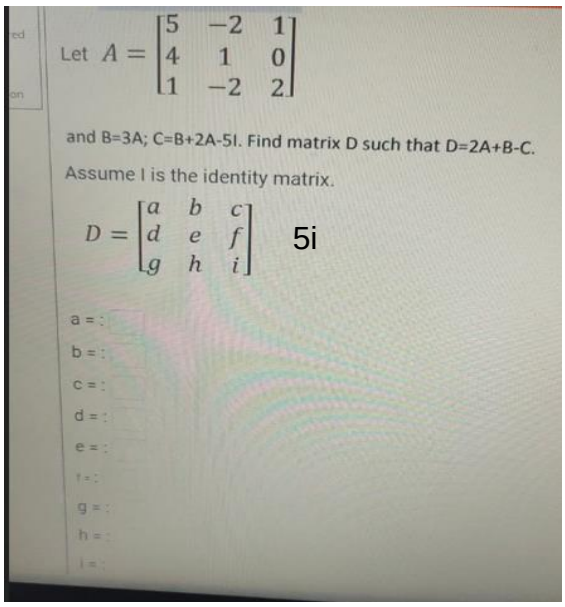

5 2
-1 0

A.A = 23 10
-5 -2

-3A = -15 -6
3 0

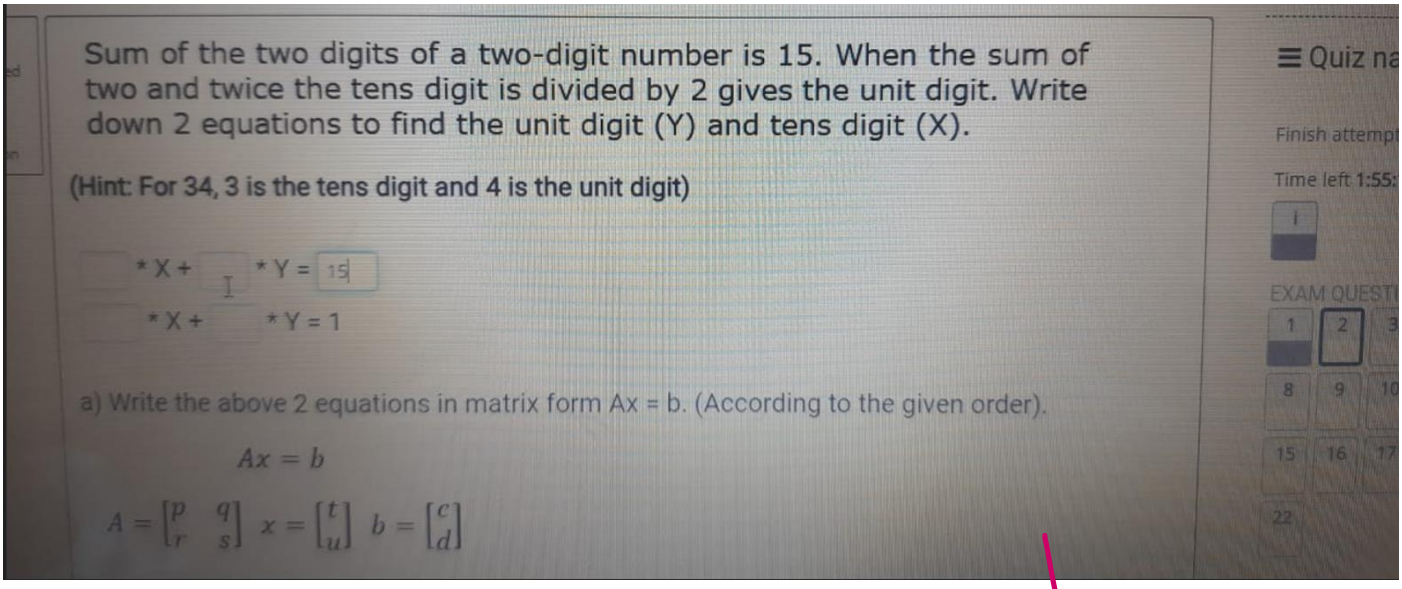
2i = 2 0
0 2

B = 10 4
-2 0

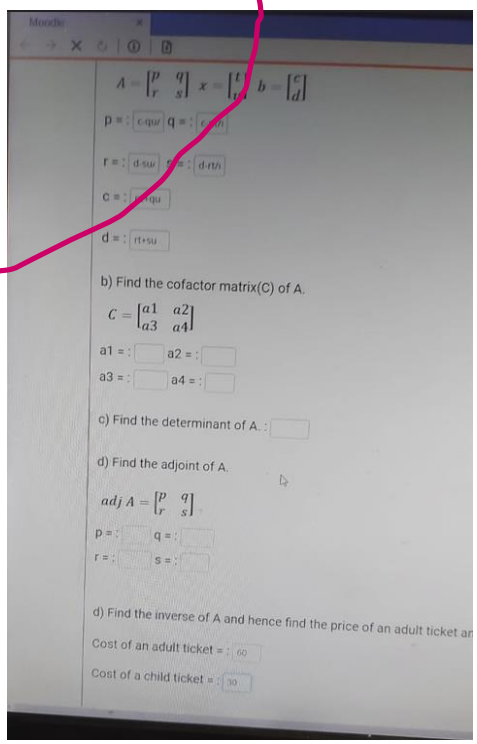



5i

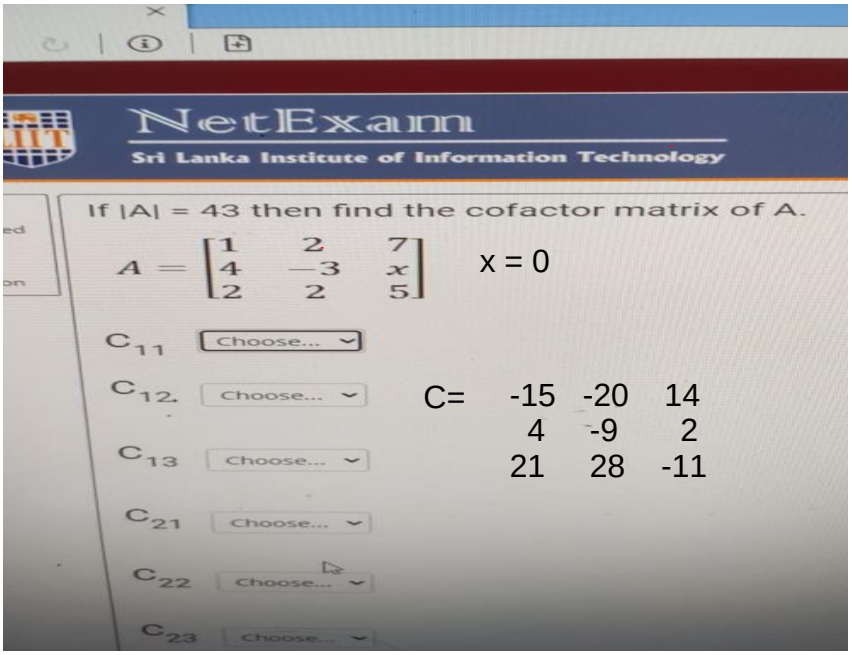
7. Sum of the two digits of a two- digit number is 15. When the sum of two and twice the ten digit is divided by 2 gives the unit digit. Write down 2 equations to find the unit digit (Y) and tens digit (X)




$$A=\begin{bmatrix} p & q \\ r & s \end{bmatrix} \quad x=\begin{bmatrix} t \\ u \end{bmatrix} \quad b=\begin{bmatrix} c \\ d \end{bmatrix}$$

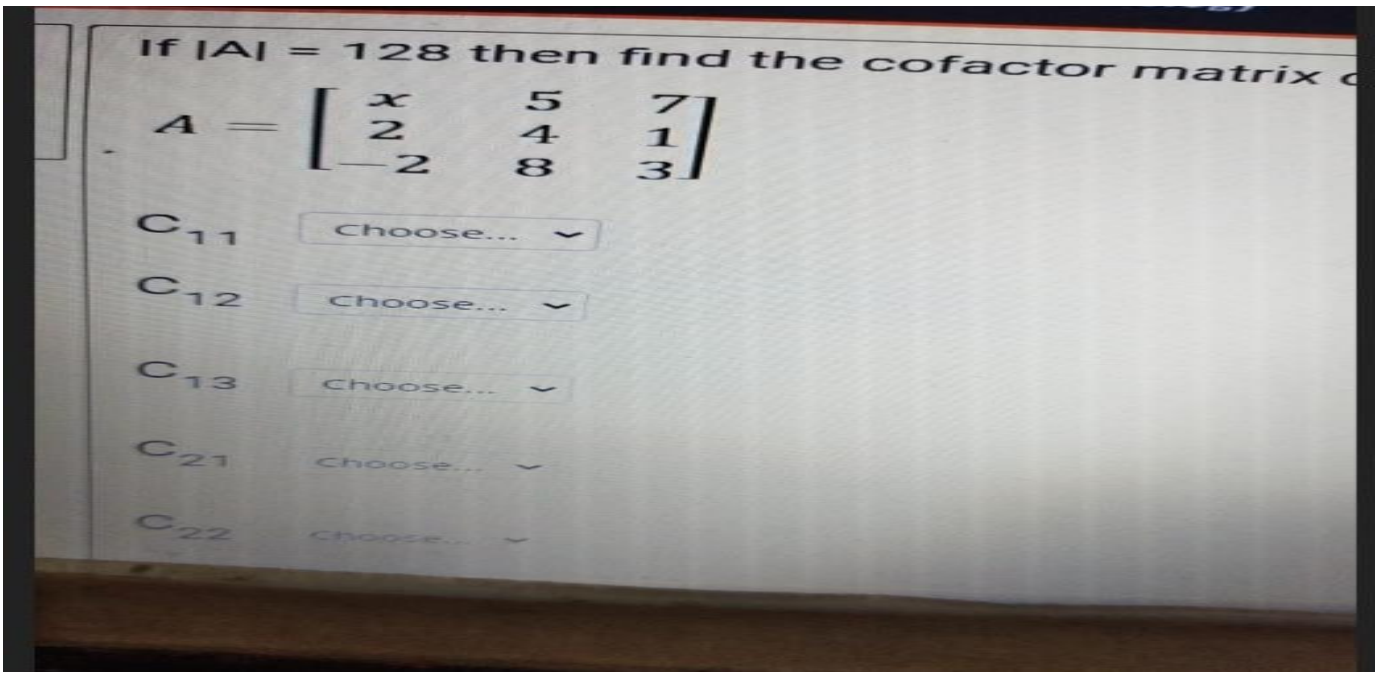



8. If |A|=43 then find the cofactor matrix of A.

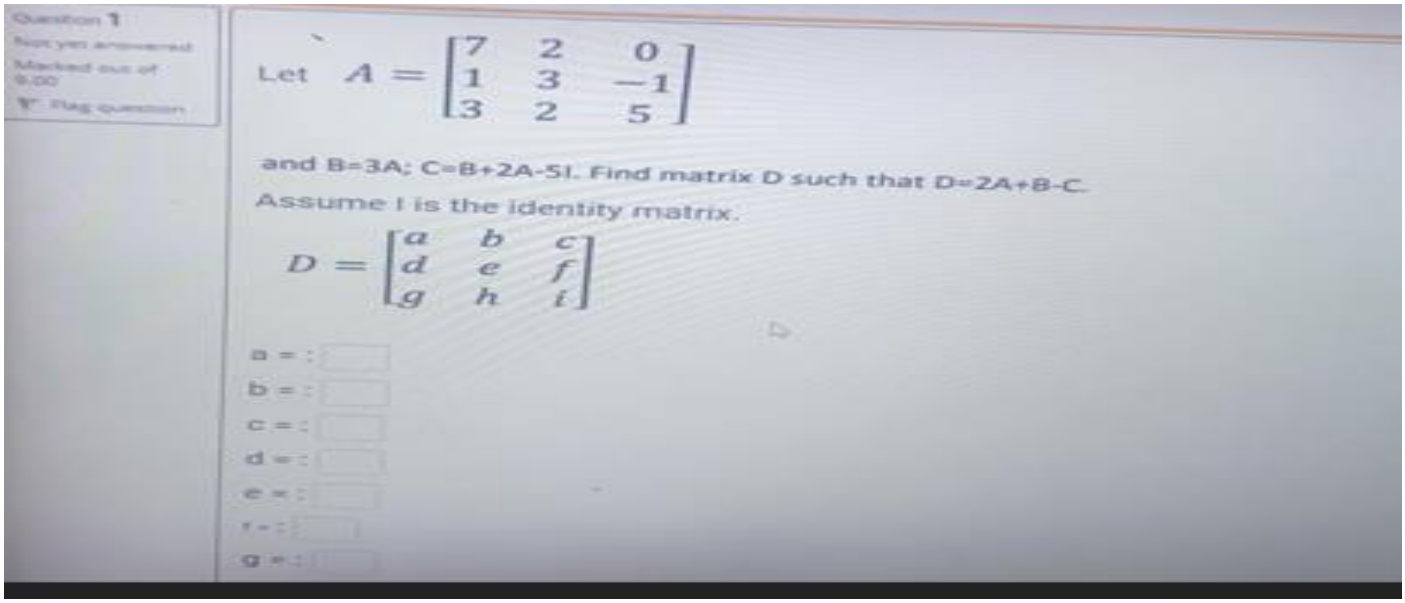



$$C=\begin{matrix} -15 & -20 & 14 \\ 4 & -9 & 2 \\ 21 & 28 & -11 \end{matrix}$$

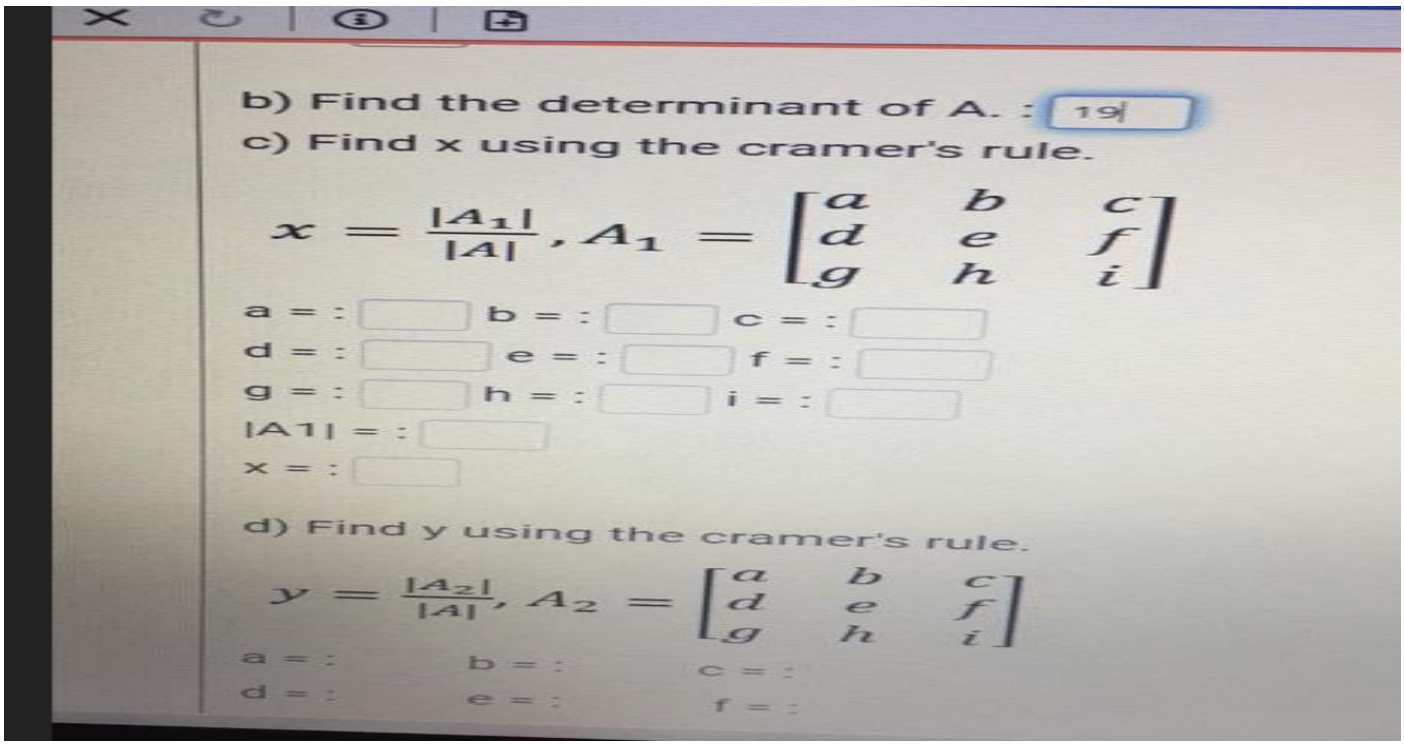
9. If |A|=128 then find the cofactor matrix of A.



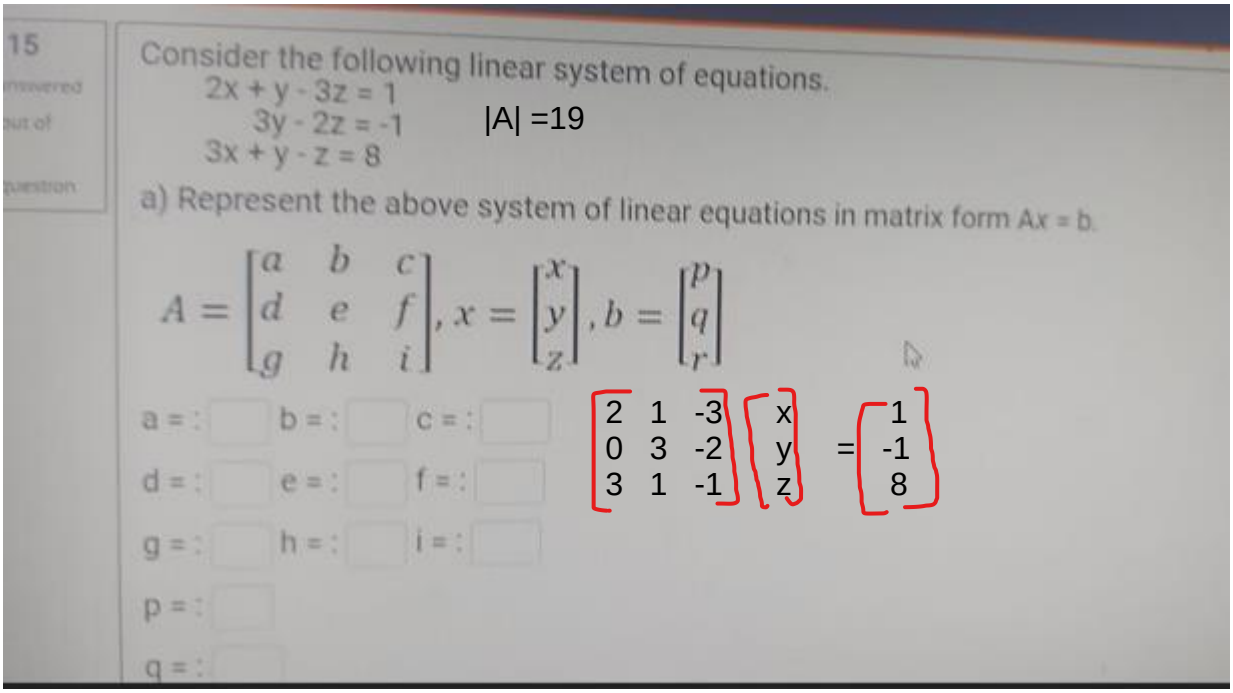

10. Let A$=\begin{bmatrix} 7 & 2 & 0 \\ 1 & 3 & -1 \\ 3 & 2 & 5 \end{bmatrix}$ Find B = 3A; C=B+2A-5I.Find matrix D such that D=2A+B-C.



11. b)Find the determinant of A. :
    c)Find x using the cramer's rule.




12. Consider the following linear system of equations.
    2x+y-3z=1
    3y-2z=-1
    3x+y-z=8

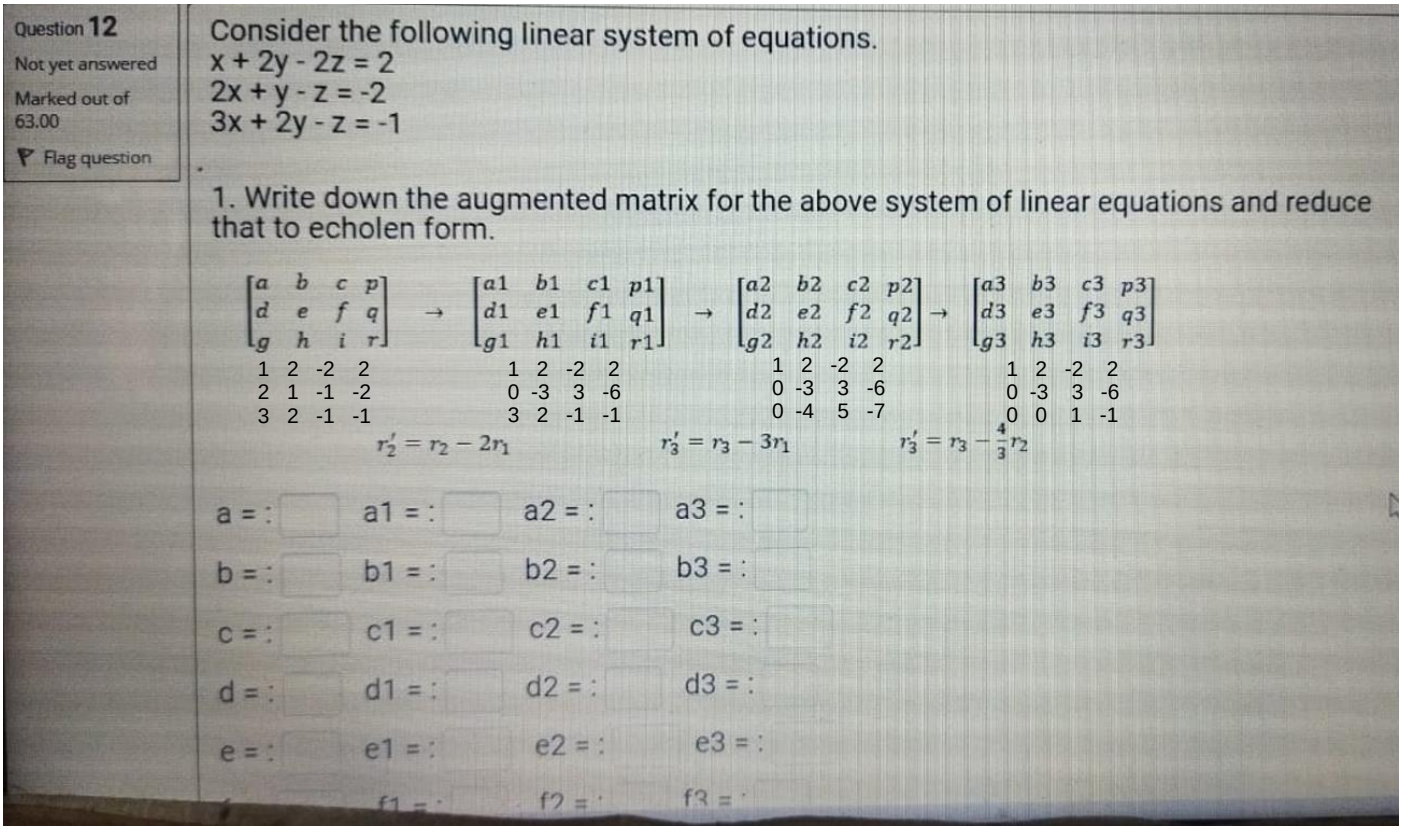


13. Consider the following linear system of equations.

X+2y-2z=2

2x+y-z=-2

3x+2y-z=-1

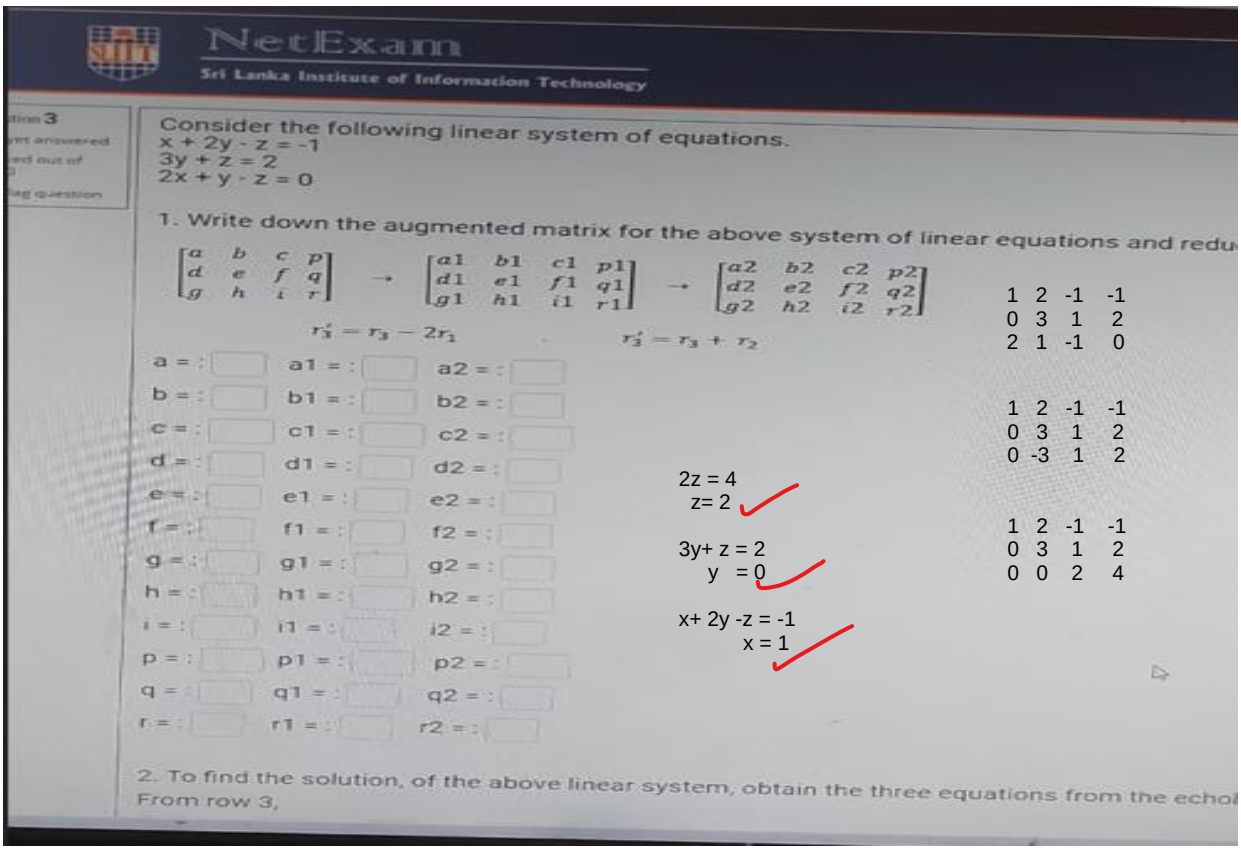



1. Consider the following linear system of equations.

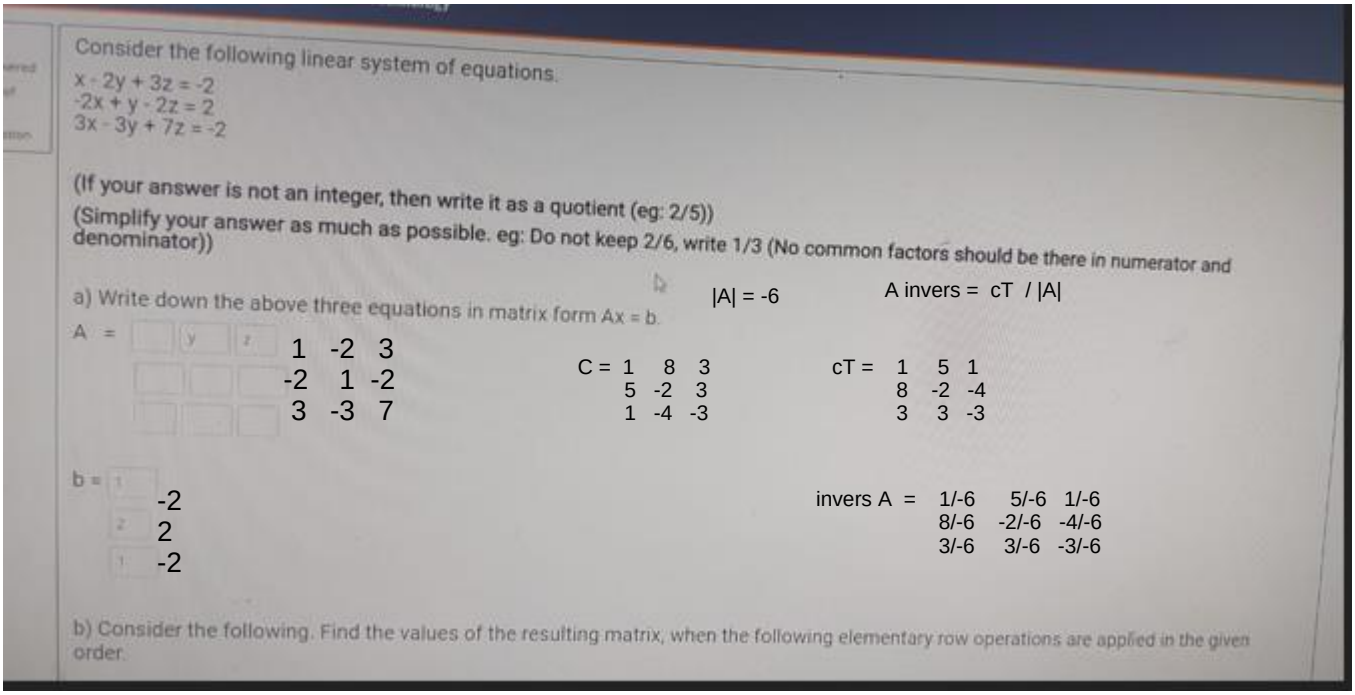
X+2y-z=-1

3y+z=2

2x+y-z=0



1. Consider the following linear system of equations.
   x-2y+3z=-2
   -2x +y-2z=2
   3x-3y+7z=-2




|A| = -6

A invers = cT / |A|

C = 1 8 3
5 -2 3
1 -4 -3

cT = 1 5 1
8 -2 -4
3 3 -3

invers A = 1/-6 5/-6 1/-6
8/-6 -2/-6 -4/-6
3/-6 3/-6 -3/-6