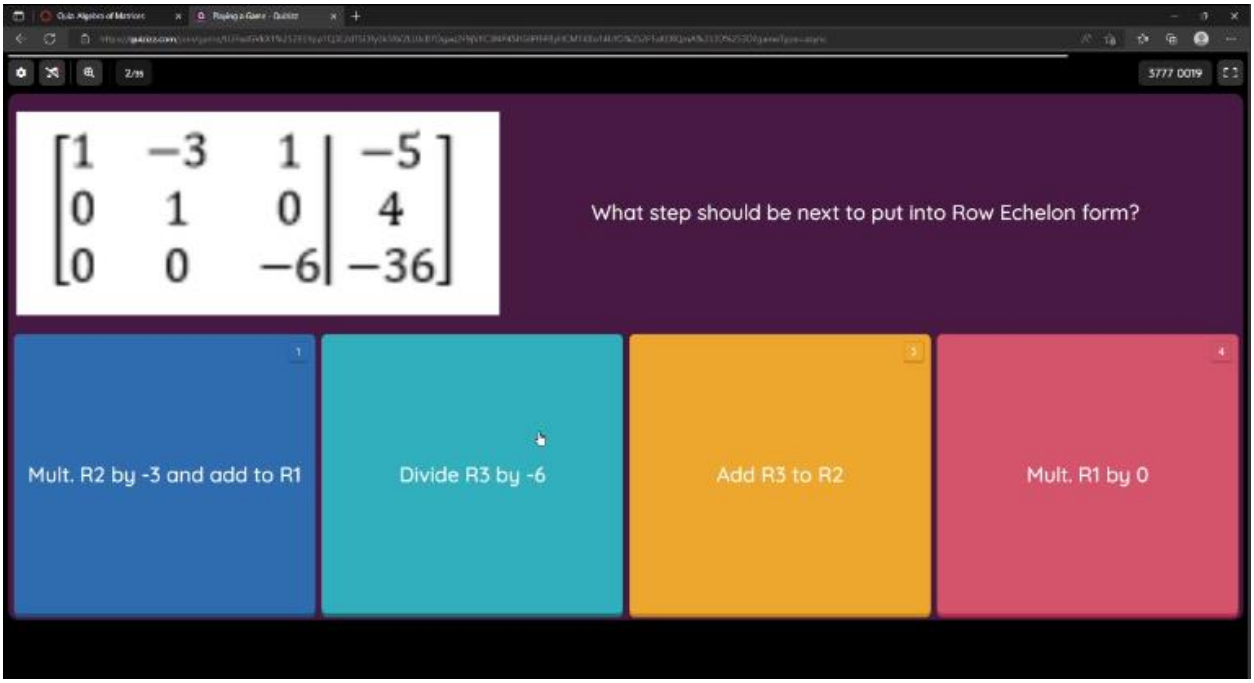
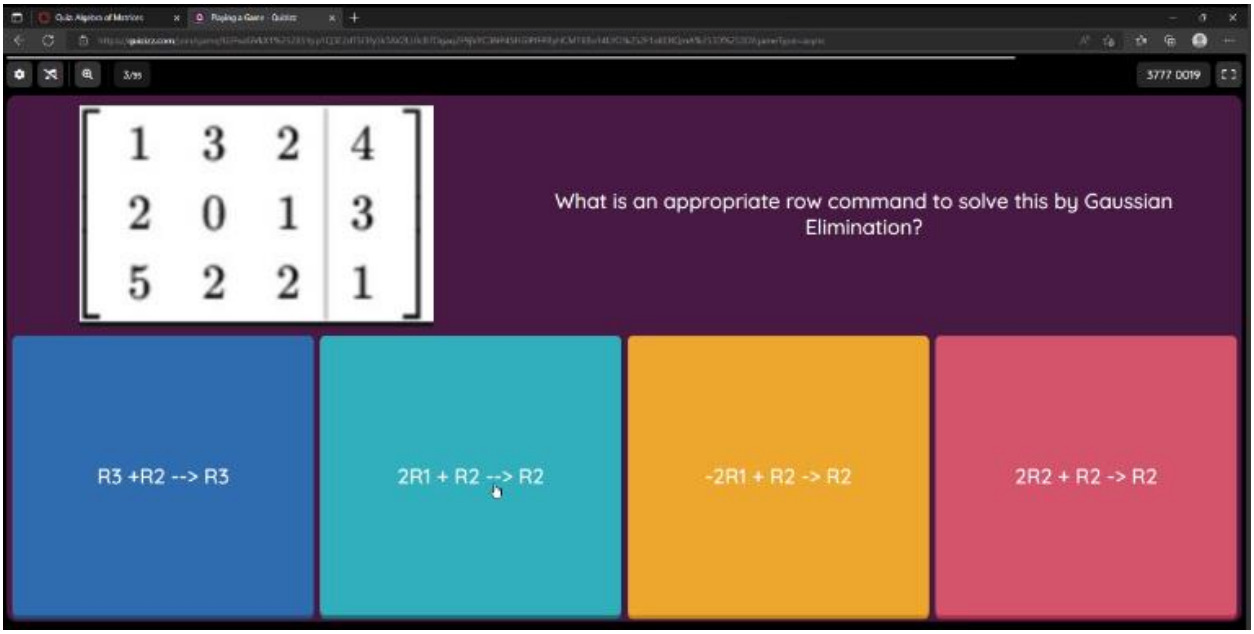
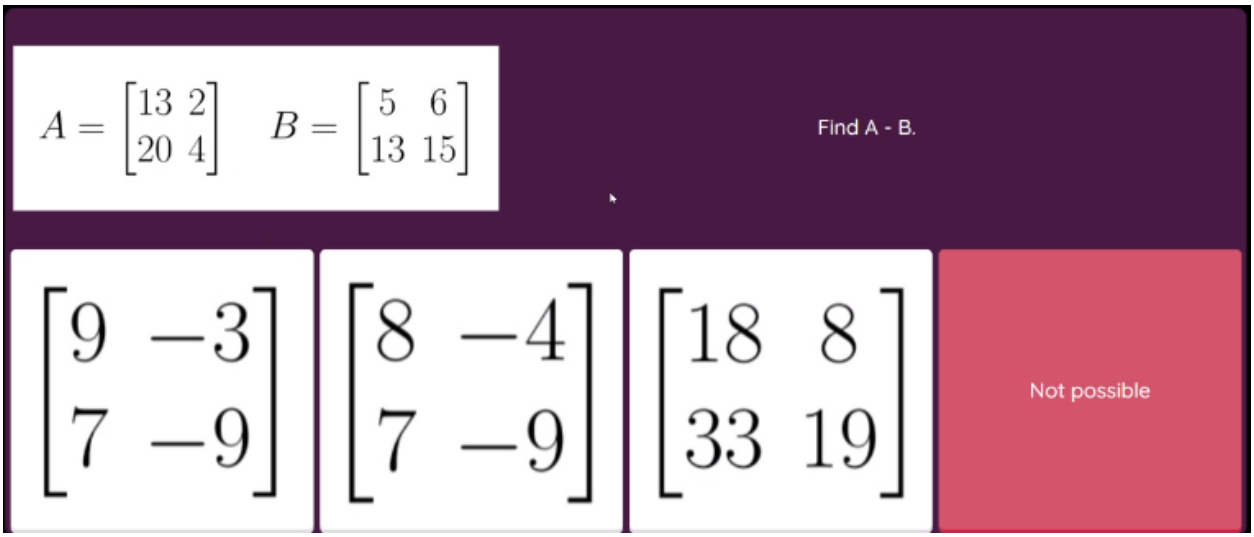


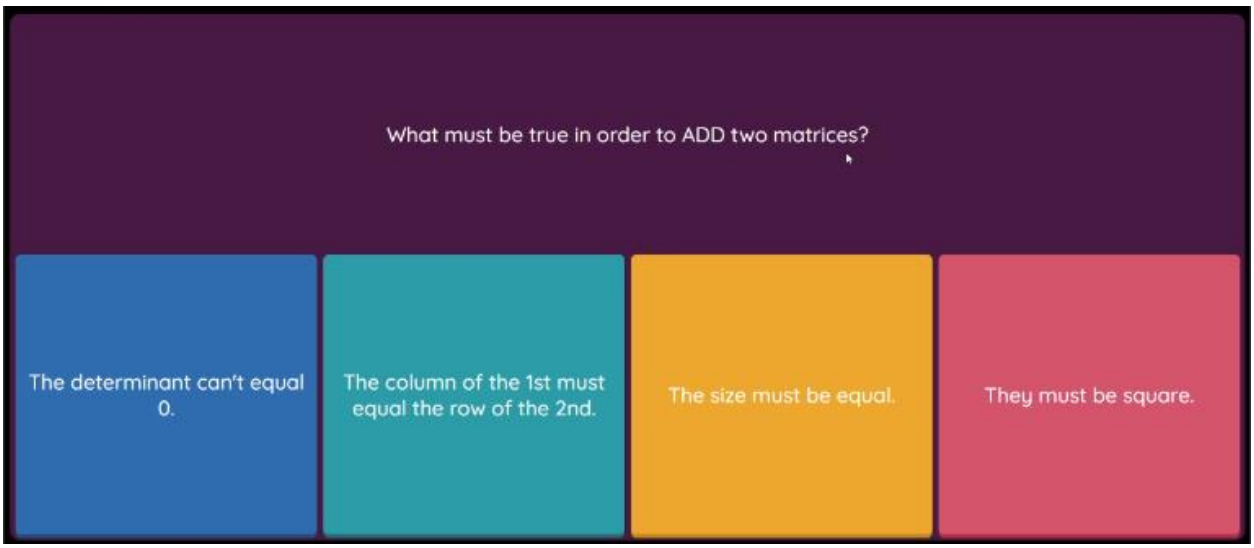
Divide R3 by -6



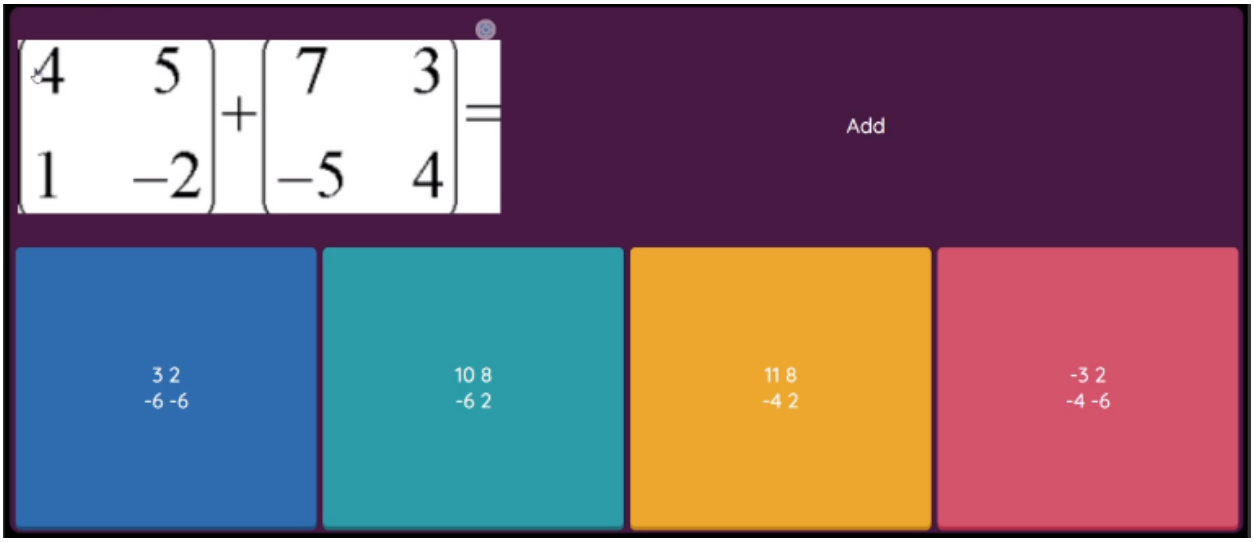
-2R1 + R2 -> R2



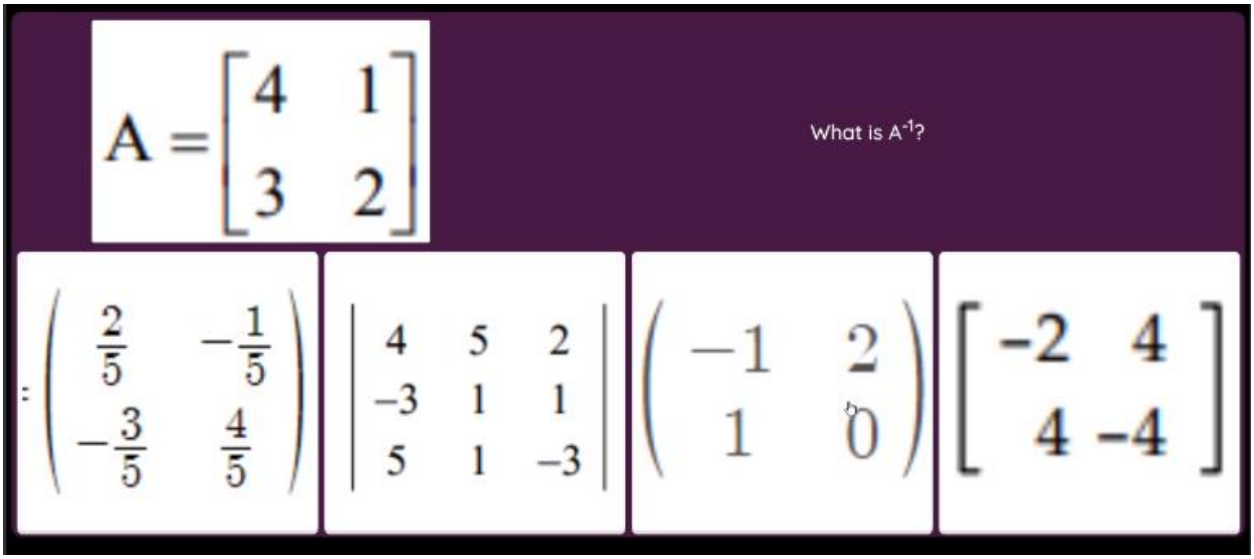
8-4
7-9

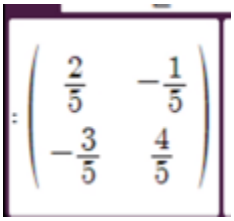


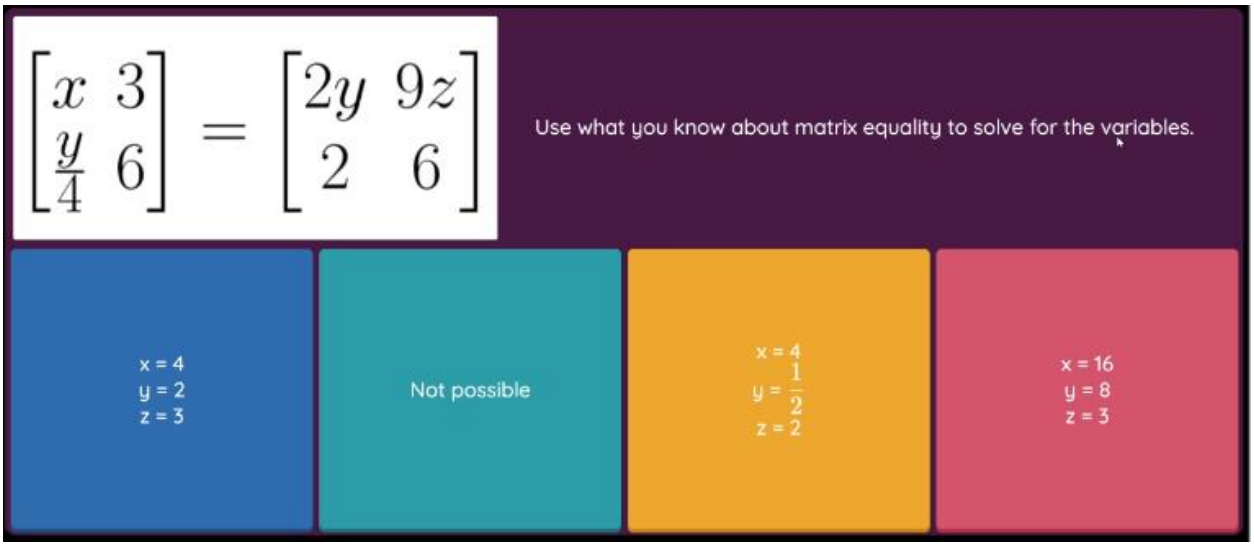
The size must be equal


$\begin{bmatrix} 4 & 5 \\ 1 & -2 \end{bmatrix} + \begin{bmatrix} 7 & 3 \\ -5 & 4 \end{bmatrix} =$
Add
3 2
-6 -6
10 8
-6 2
11 8
-4 2
-3 2
-4 -6

11 8
-4 2


$A = \begin{bmatrix} 4 & 1 \\ 3 & 2 \end{bmatrix}$
What is A^{-1}?
$\begin{pmatrix} \frac{2}{5} & -\frac{1}{5} \\ -\frac{3}{5} & \frac{4}{5} \end{pmatrix}$
$\begin{vmatrix} 4 & 5 & 2 \\ -3 & 1 & 1 \\ 5 & 1 & -3 \end{vmatrix}$
$\begin{pmatrix} -1 & 2 \\ 1 & 0 \end{pmatrix}$
$\begin{bmatrix} -2 & 4 \\ 4 & -4 \end{bmatrix}$

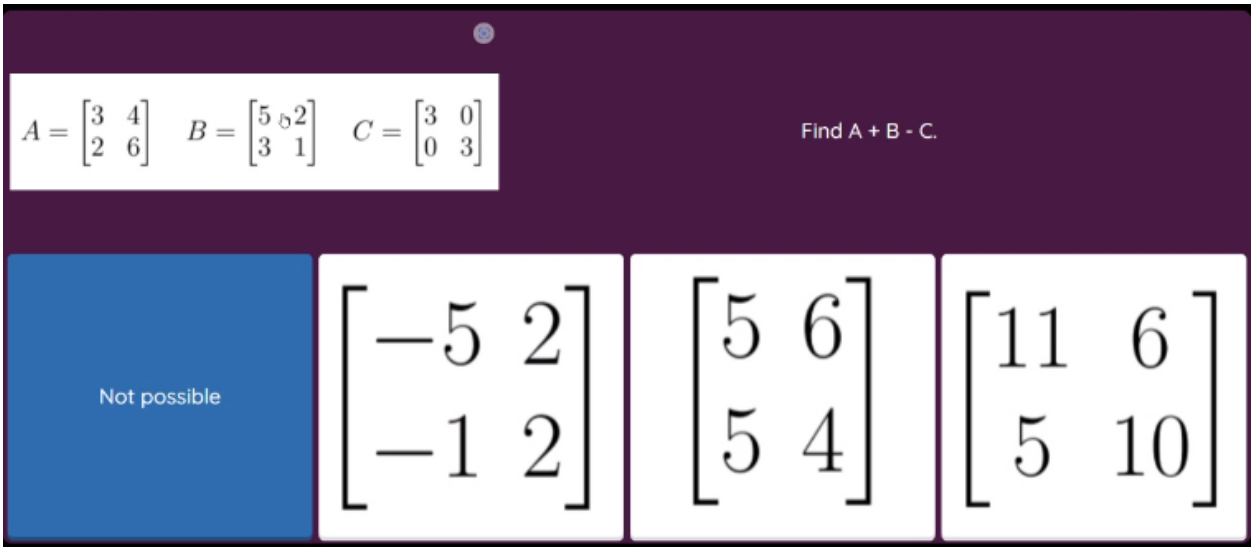

$\begin{pmatrix} \frac{2}{5} & -\frac{1}{5} \\ -\frac{3}{5} & \frac{4}{5} \end{pmatrix}$


$\begin{bmatrix} x & 3 \\ \frac{y}{4} & 6 \end{bmatrix} = \begin{bmatrix} 2y & 9z \\ 2 & 6 \end{bmatrix}$
Use what you know about matrix equality to solve for the variables.
x = 4
y = 2
z = 3
Not possible
x = 4
$y = \frac{1}{2}$
z = 2
x = 16
y = 8
z = 3

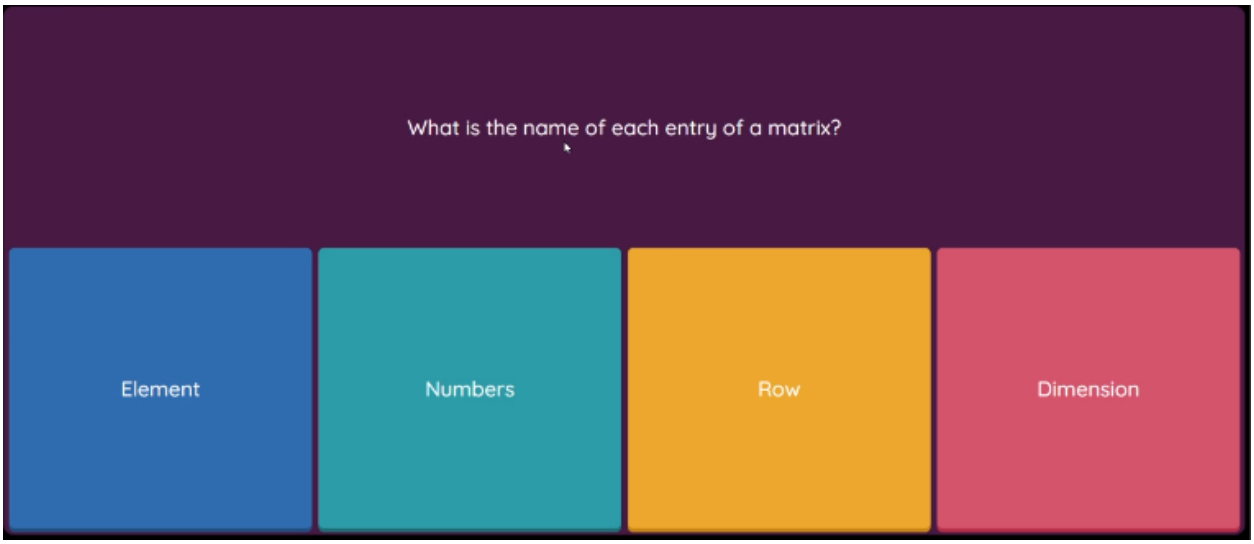
X = 16, y = 8, z = 3


$\left[\begin{array}{ccc|c} 1 & 0 & 1 & -3 \\ 0 & 1 & -1 & 2 \\ 0 & 0 & 2 & 10 \end{array}\right]$
Solve!
(-8,7,5)
(-3,2,5)
(2,7,5)
(-8,2,5)

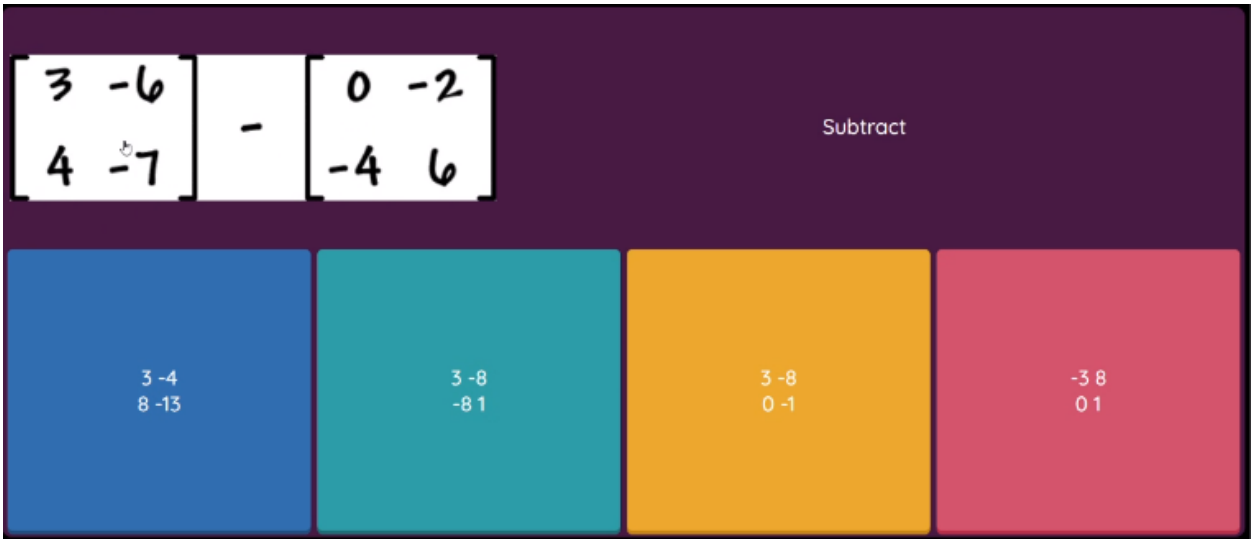
-8,7,5



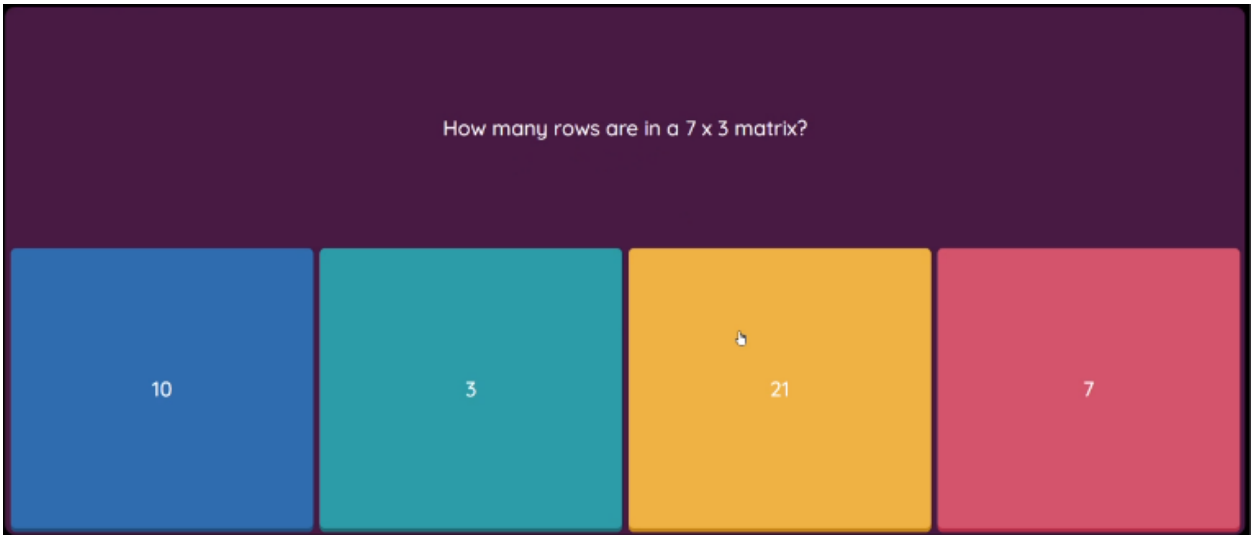
5,6
5,4



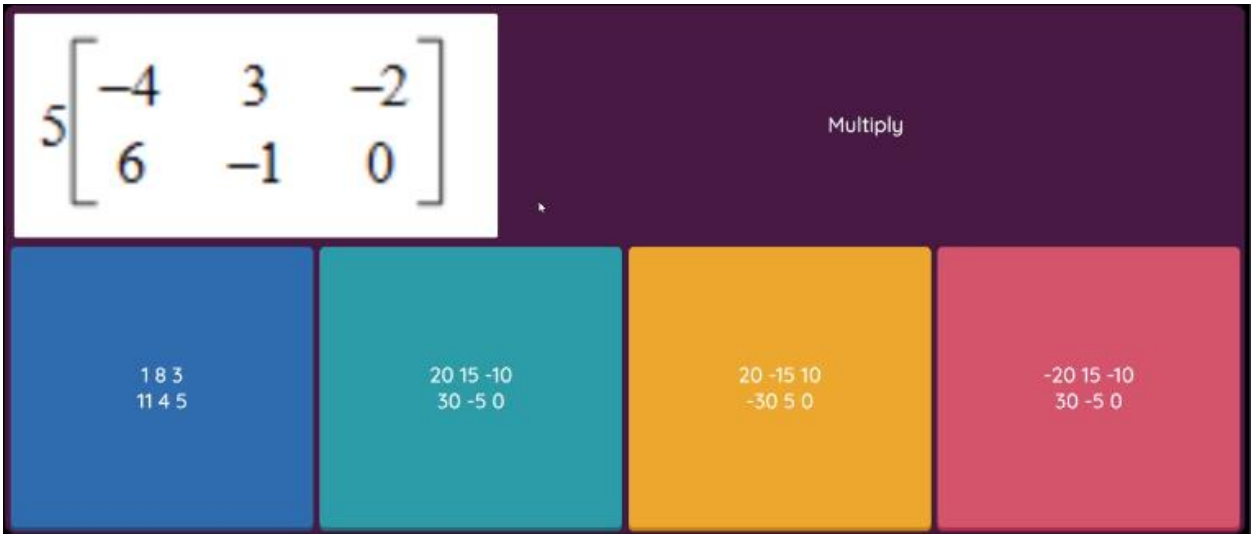
Element


3 -6
4 -7
-
0 -2
-4 6
Subtract
3 -4
8 -13
3 -8
-8 1
3 -8
0 -1
-3 8
0 1

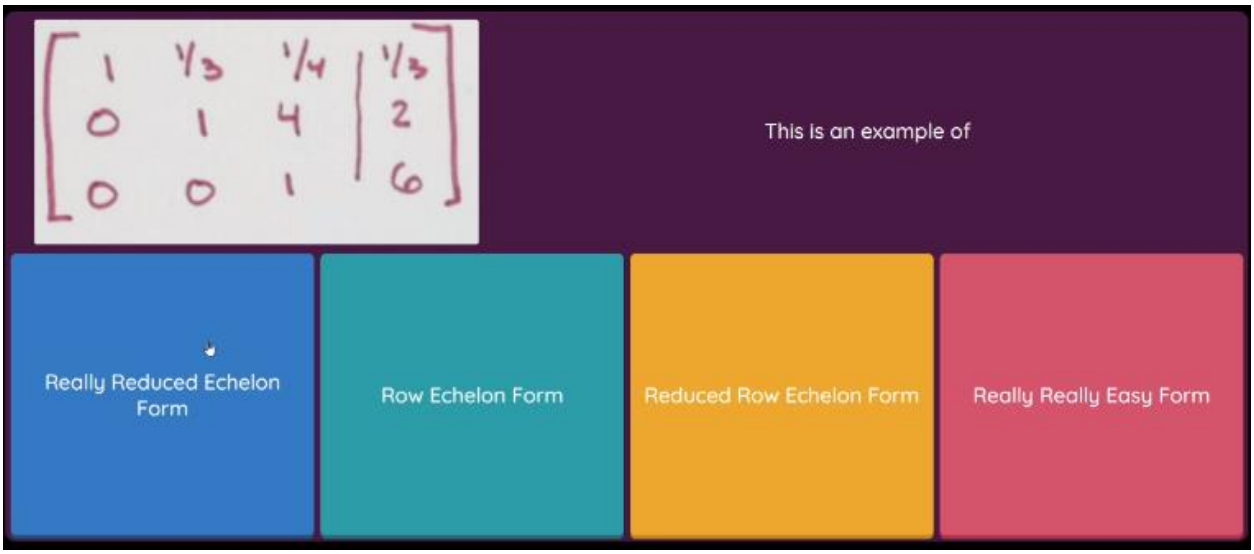
3 -4
8 -13


How many rows are in a 7 x 3 matrix?
10
3
21
7

7



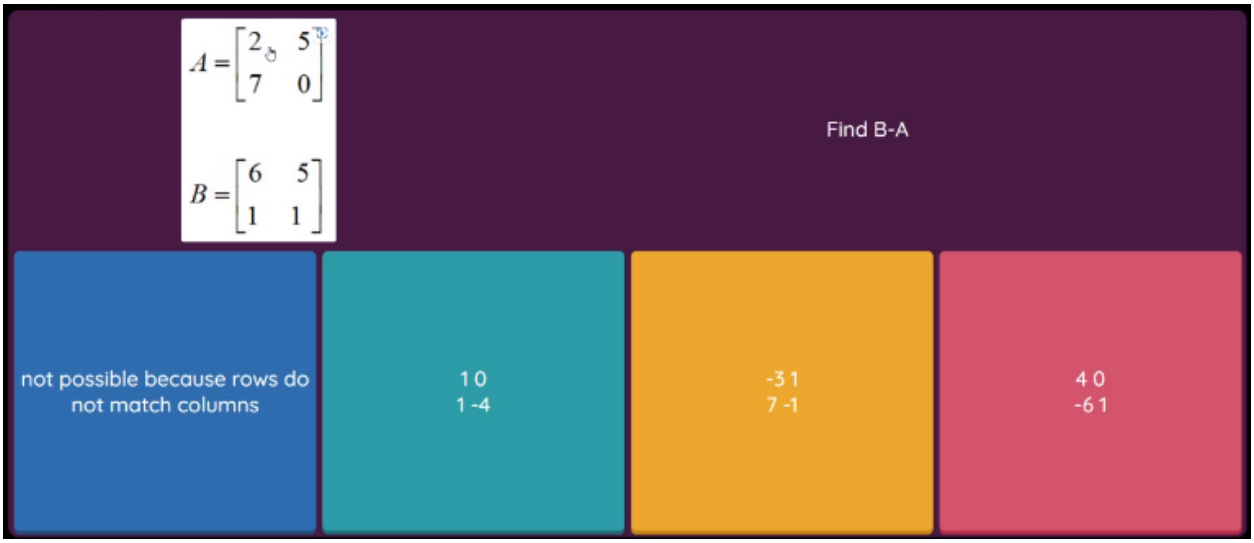
-20 15 -10
30 -5 0



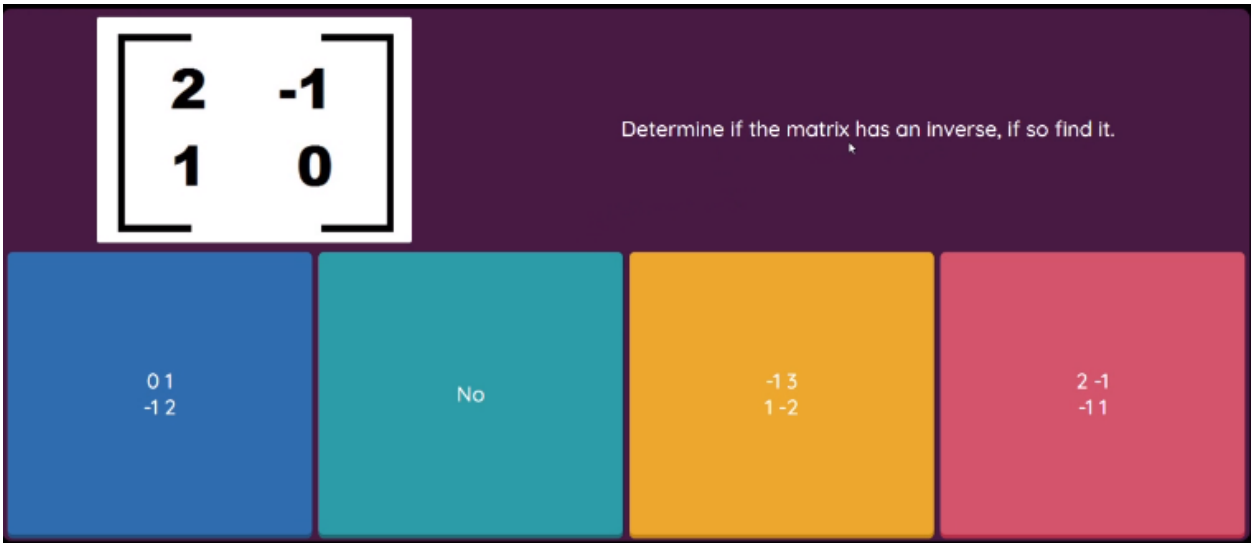
Row echelon Form


6 -8
-3 4
Determine if the matrix has an inverse, if so find it.
No
0 1
-1 2
2 -1
-1 1
-1 3
1 -2

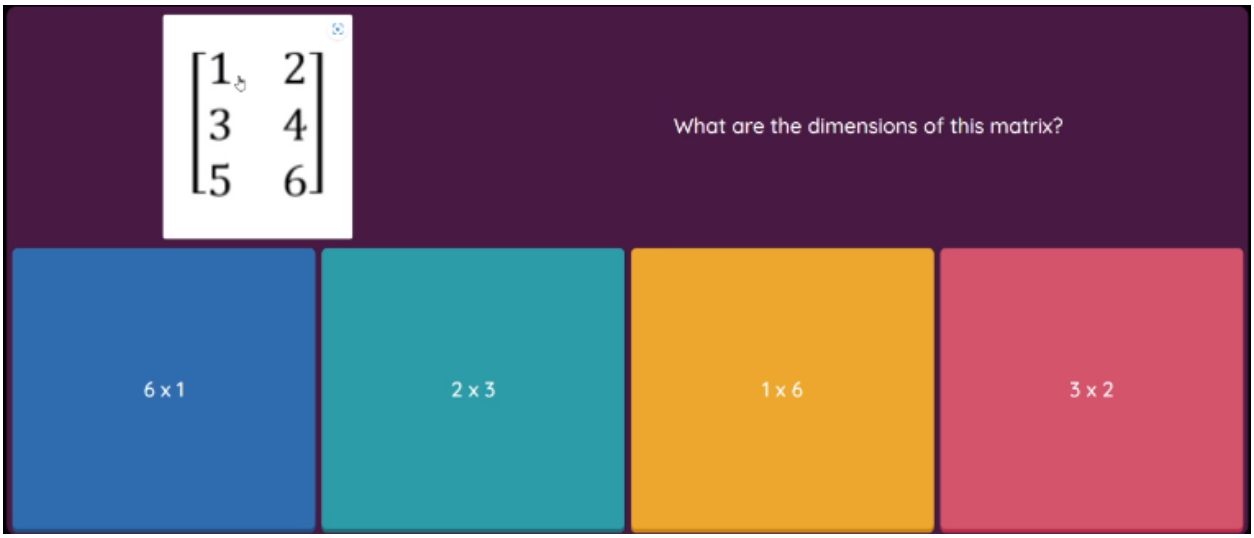
No


$A = \begin{bmatrix} 2 & 5 \\ 7 & 0 \end{bmatrix}$
$B = \begin{bmatrix} 6 & 5 \\ 1 & 1 \end{bmatrix}$
Find B-A
not possible because rows do not match columns
1 0
1 -4
-3 1
7 -1
4 0
-6 1

4 0
-6 1

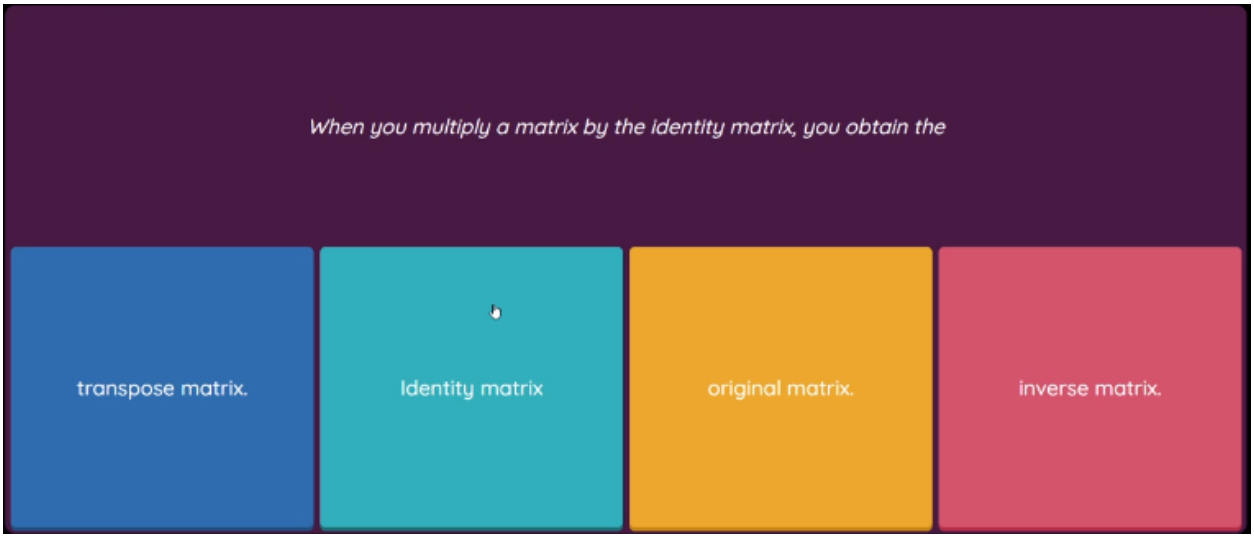

2 -1
1 0
Determine if the matrix has an inverse, if so find it.
0 1
-1 2
No
-1 3
1 -2
2 -1
-1 1

0 1
-1 2

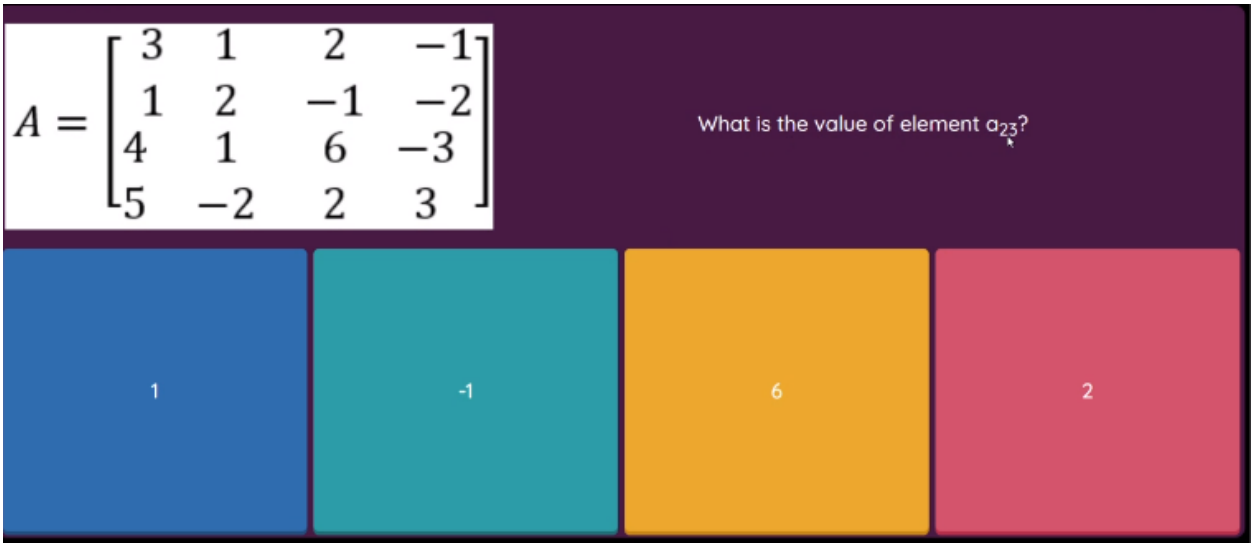

What are the dimensions of this matrix?
6 x 1
2 x 3
1 x 6
3 x 2

3x2

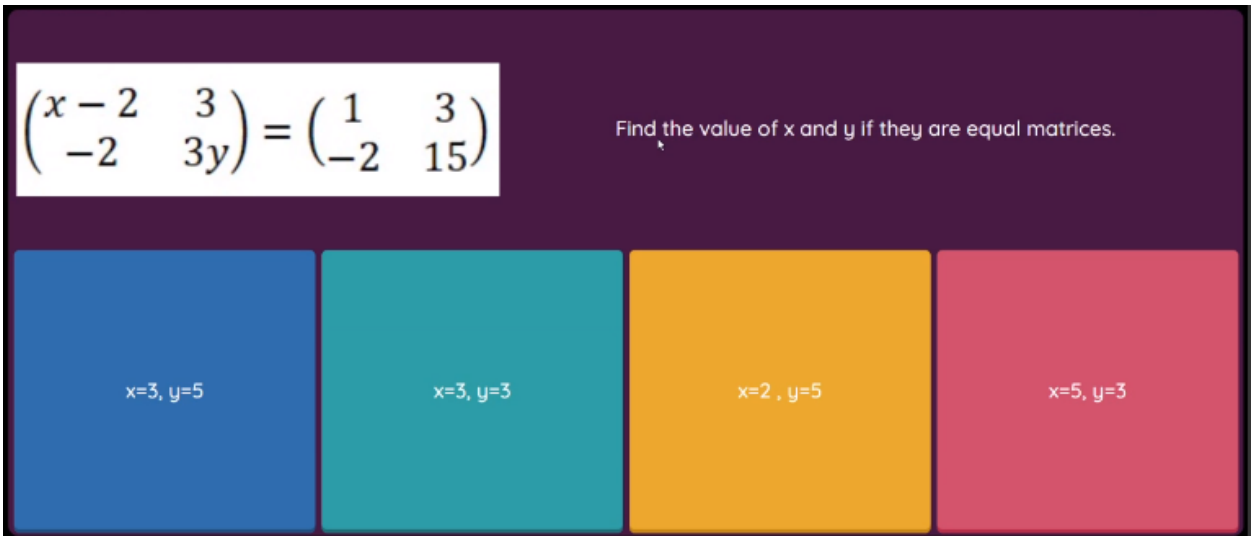
-9 8 3 2



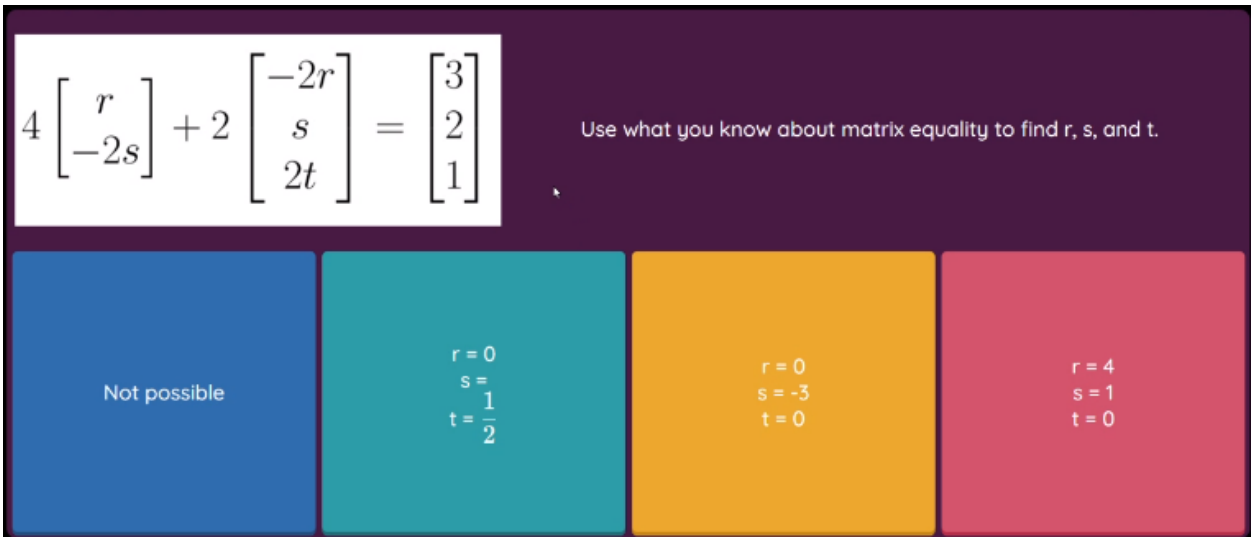
Original


$A = \begin{bmatrix} 3 & 1 & 2 & -1 \\ 1 & 2 & -1 & -2 \\ 4 & 1 & 6 & -3 \\ 5 & -2 & 2 & 3 \end{bmatrix}$
What is the value of element a_{23}?
1
-1
6
2

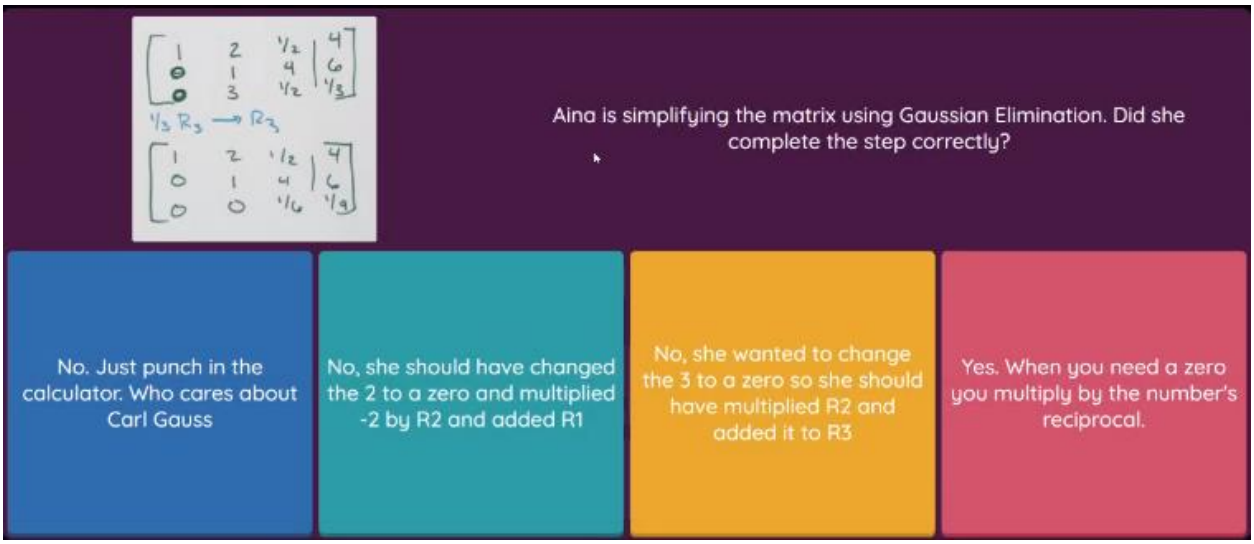
-1


$\begin{pmatrix} x-2 & 3 \\ -2 & 3y \end{pmatrix} = \begin{pmatrix} 1 & 3 \\ -2 & 15 \end{pmatrix}$
Find the value of x and y if they are equal matrices.
x=3, y=5
x=3, y=3
x=2 , y=5
x=5, y=3

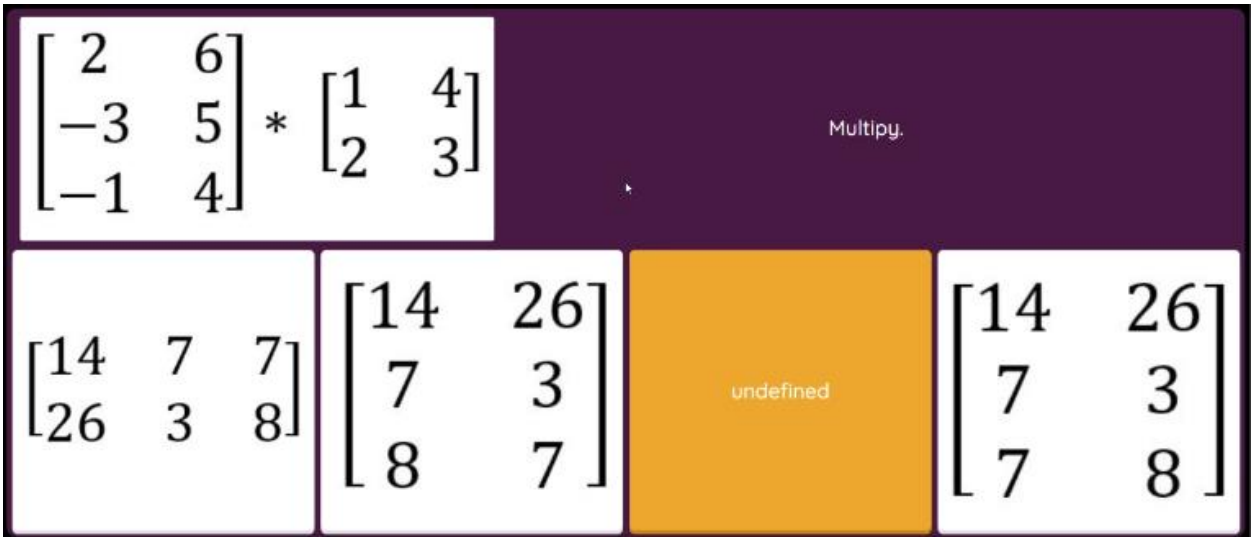
X=3 y=5

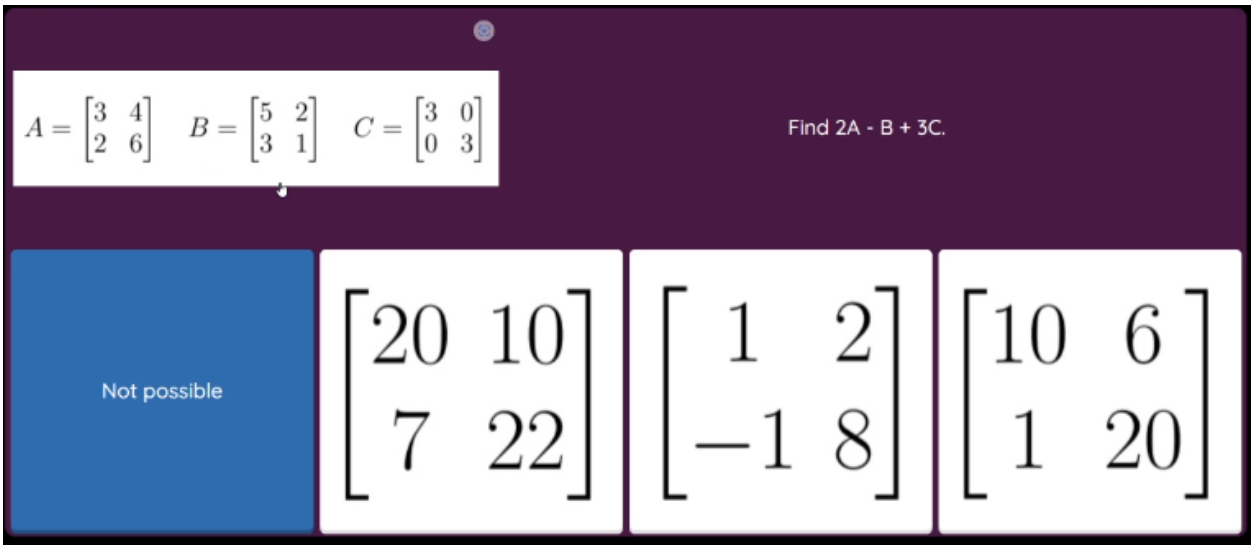


Not possible

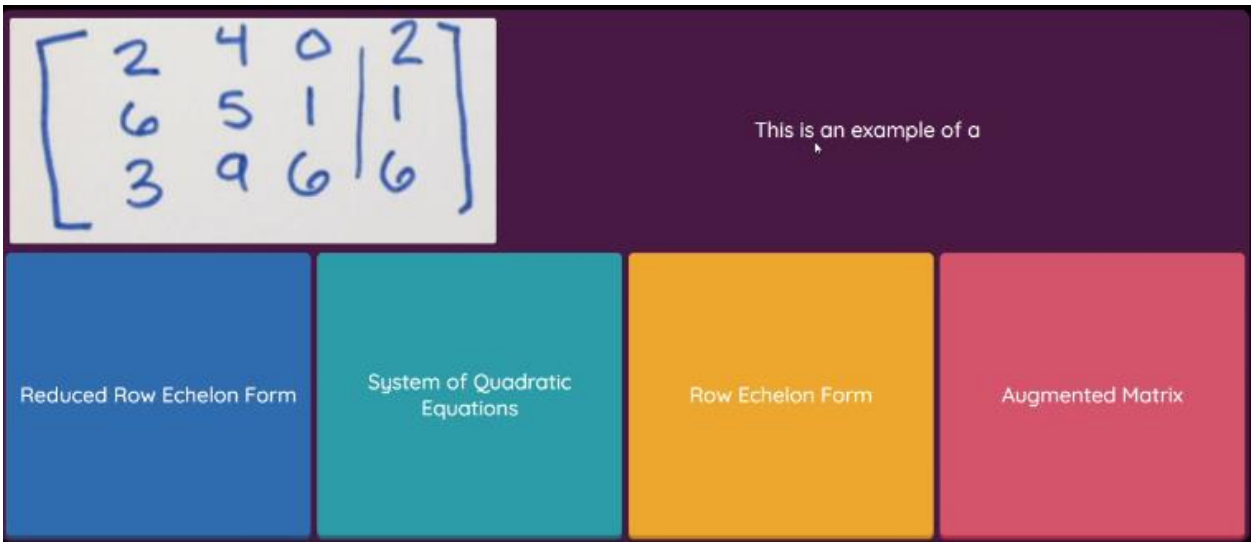


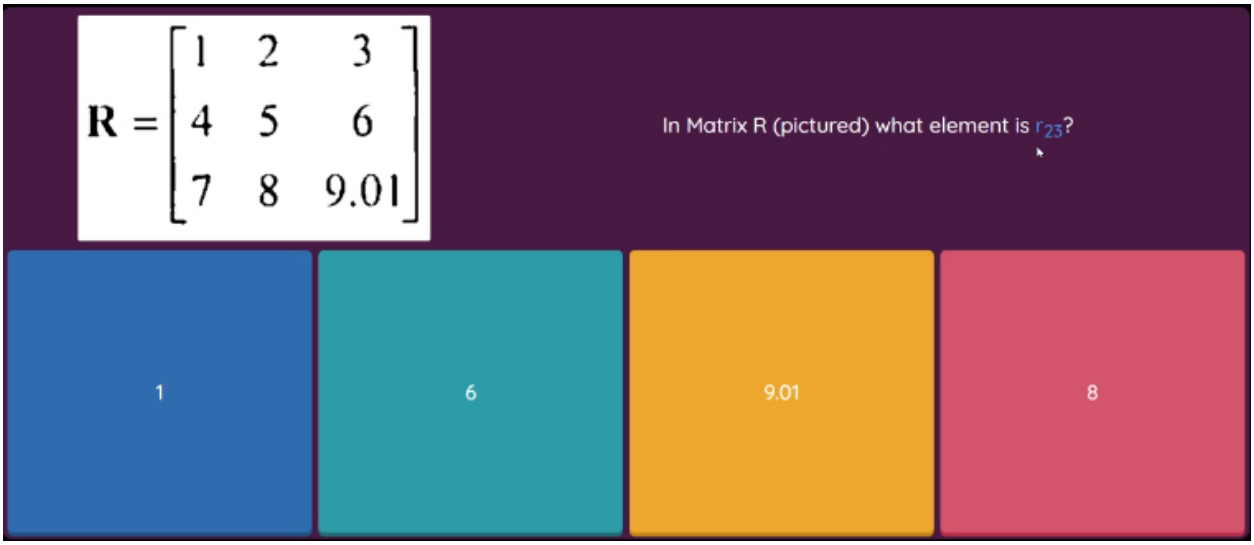
no, she wanted to change the 3


$\begin{bmatrix} 2 & 6 \\ -3 & 5 \\ -1 & 4 \end{bmatrix} * \begin{bmatrix} 1 & 4 \\ 2 & 3 \end{bmatrix}$
Multipy.
$\begin{bmatrix} 14 & 7 & 7 \\ 26 & 3 & 8 \end{bmatrix}$
$\begin{bmatrix} 14 & 26 \\ 7 & 3 \\ 8 & 7 \end{bmatrix}$
undefined
$\begin{bmatrix} 14 & 26 \\ 7 & 3 \\ 7 & 8 \end{bmatrix}$

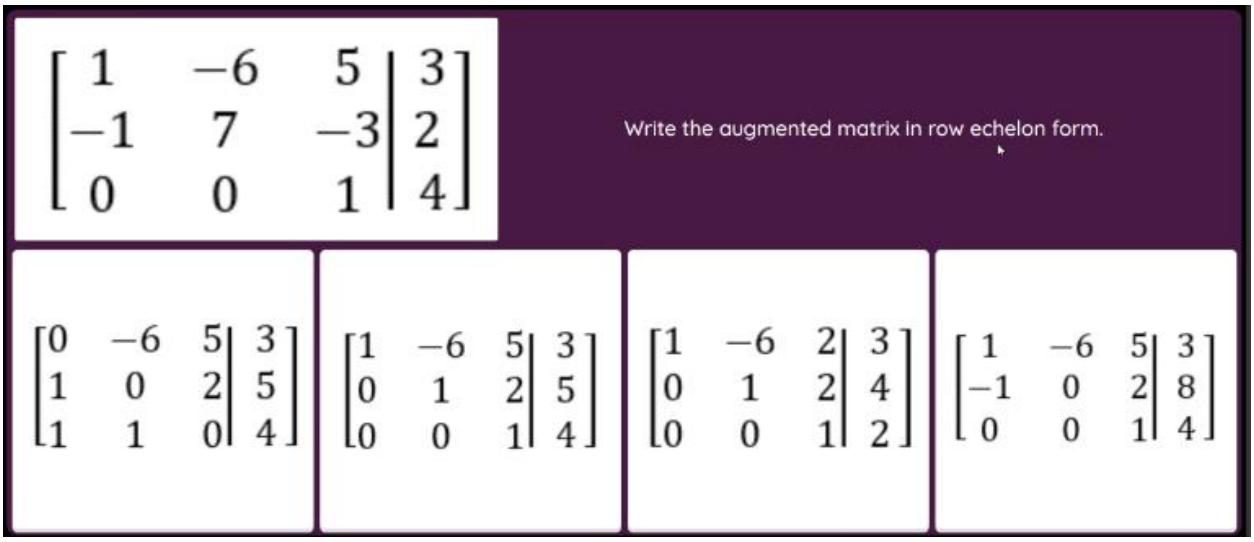

$A = \begin{bmatrix} 3 & 4 \\ 2 & 6 \end{bmatrix}$ $B = \begin{bmatrix} 5 & 2 \\ 3 & 1 \end{bmatrix}$ $C = \begin{bmatrix} 3 & 0 \\ 0 & 3 \end{bmatrix}$
Find 2A - B + 3C.
Not possible
$\begin{bmatrix} 20 & 10 \\ 7 & 22 \end{bmatrix}$
$\begin{bmatrix} 1 & 2 \\ -1 & 8 \end{bmatrix}$
$\begin{bmatrix} 10 & 6 \\ 1 & 20 \end{bmatrix}$

10 6 1 20

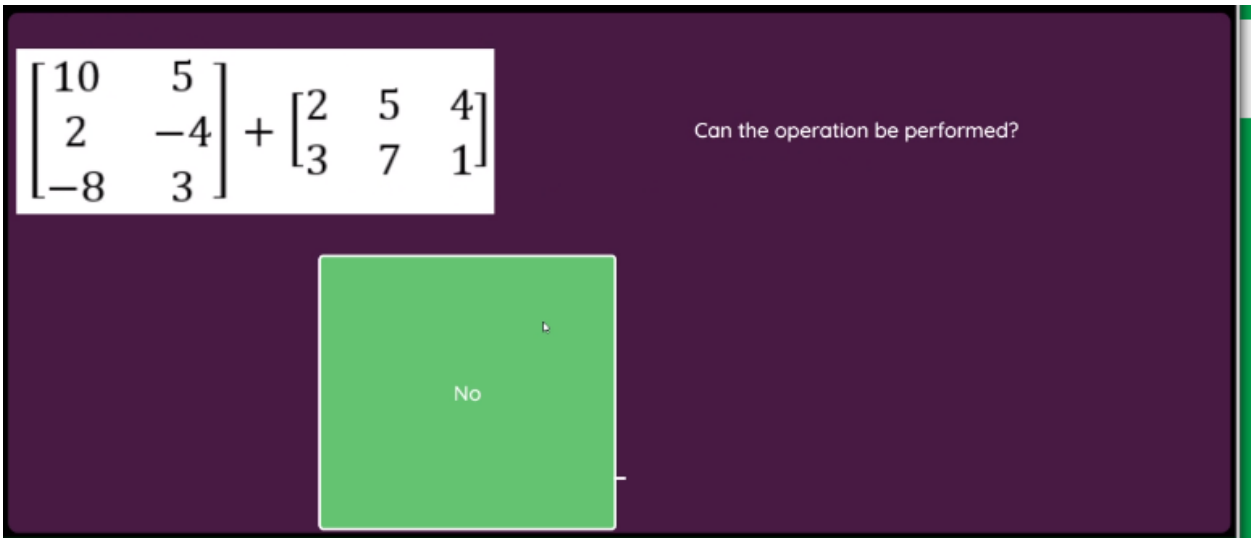

This is an example of a
Reduced Row Echelon Form
System of Quadratic Equations
Row Echelon Form
Augmented Matrix

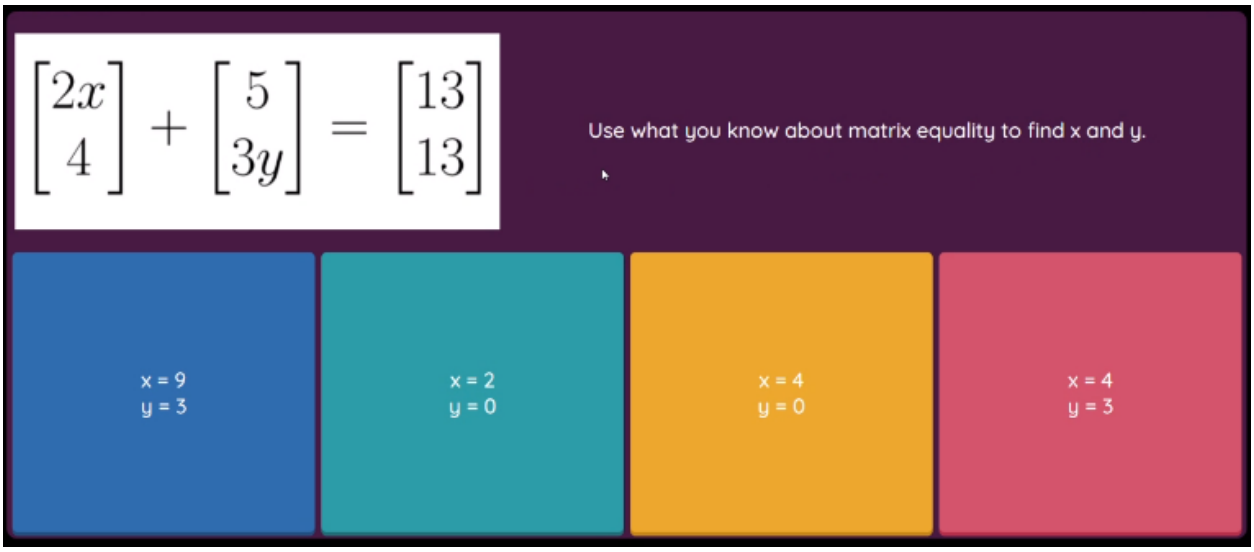

In Matrix R (pictured) what element is r_{23}?
1
6
9.01
8

6



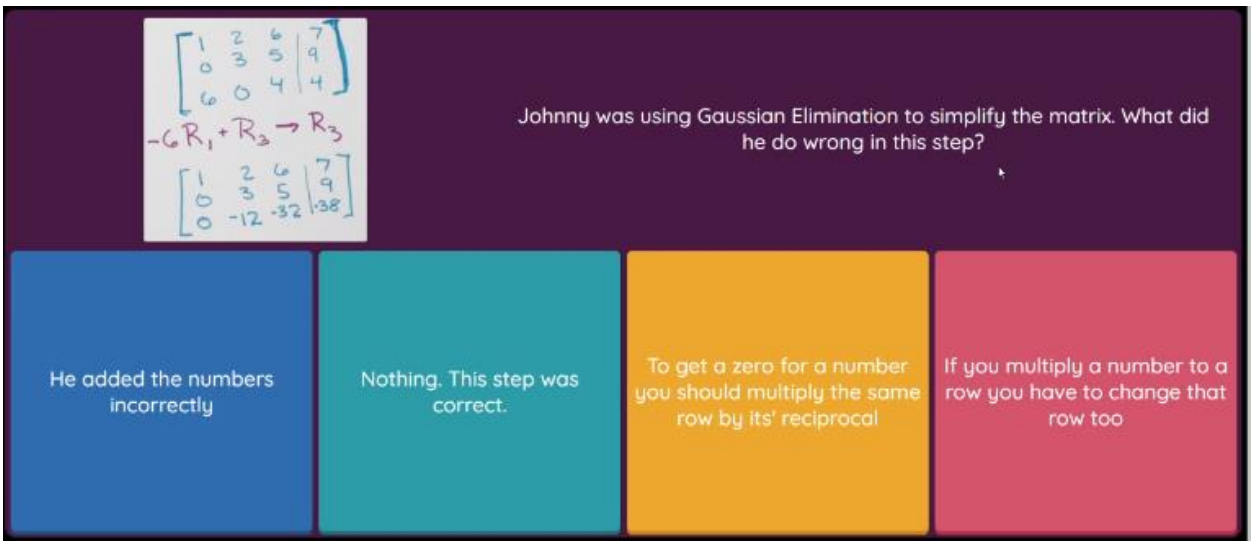
1 -6 5 3
0 1 2 5
0 0 1 4



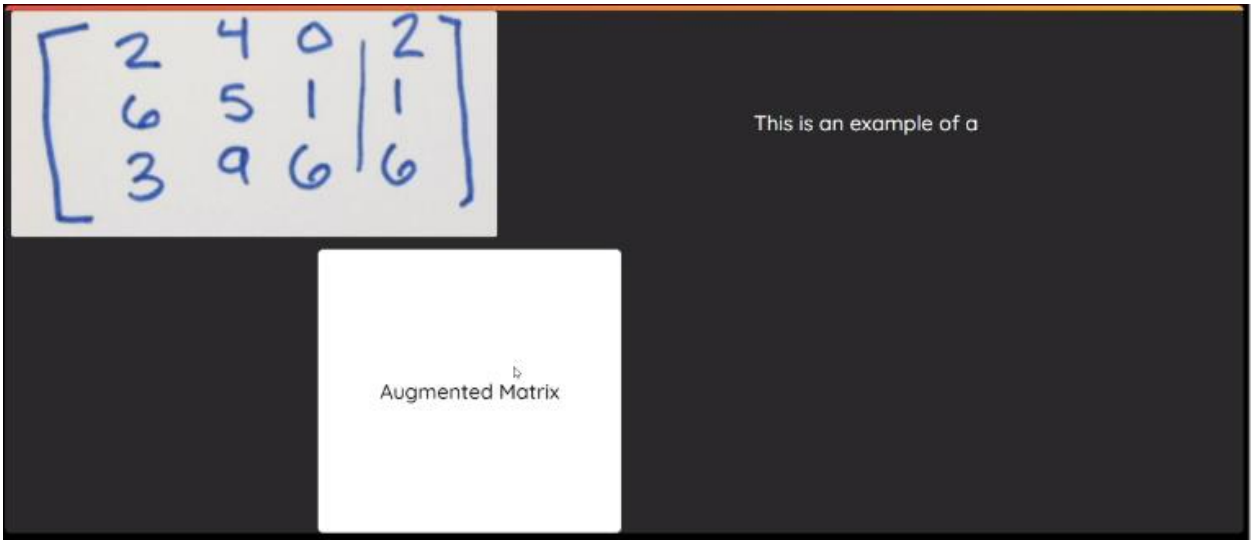


X = 4

Y = 3



Nothing, this step was correct



Augmented