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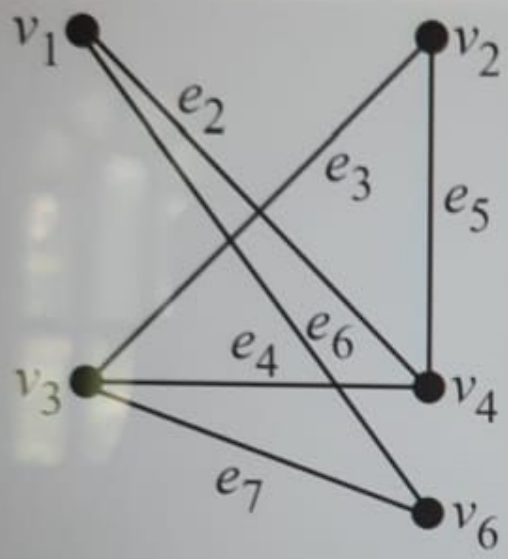
Consider the following graph.



Total degrees must be even
If there is a single degree vertex then no circuits

Determine whether the above graph has the followings.

Hamilton Path	Choose...	yes
Hamilton Circuit	Choose... / Yes / No	yes
Euler Path		yes
Euler Circuit	Choose...	no

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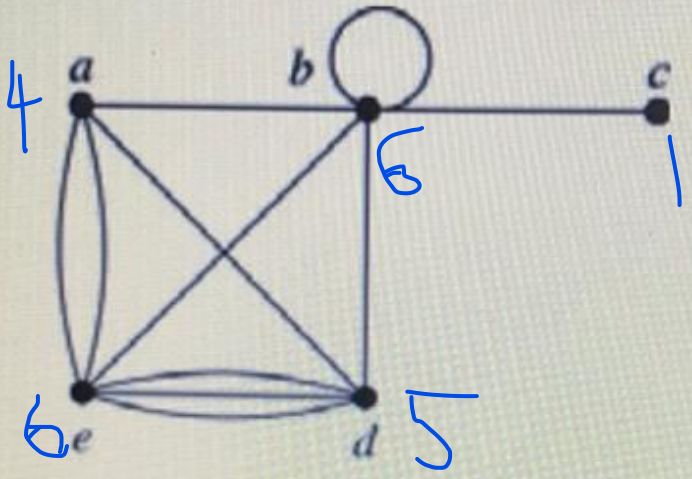
Question 6

Not yet answered

Marked out of 4.00

Flag question

Consider the following graph.



Determine whether the above graph has the followings.

Hamilton Path	Yes
Hamilton Circuit	No
Euler Path	Yes
Euler Circuit	No

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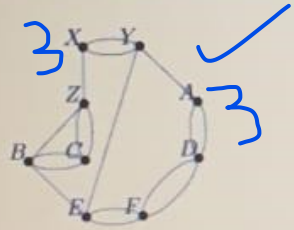
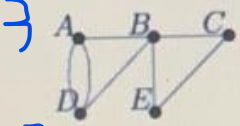
Which of these graphs **do not** have Euler Paths?

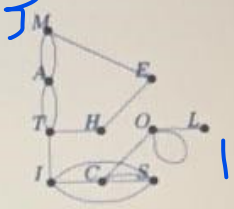
(Hint: A theorem for Euler paths can be used.)



A



B



C

Select one:

- A only
- B only
- C only
- All graphs
- None of the above

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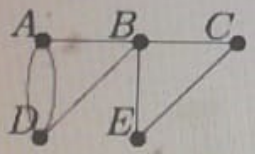
n 5

answered

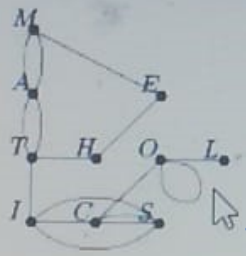
l out of

question

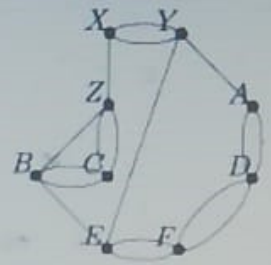
Which of these graphs have Hamiltonian Circuits?



A



B



C

Select one:

- A only
- B only
- C only
- All graphs
- None of the above

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How many permutations of 3 **different** digits are there, chosen from the ten digits 0 to 9 inclusive?

Select one:

- 84
- 120
- 504
- 720 ←
- None of the above

$^{10}P_3$

720

10 × 9 × 8

90 × 8

720

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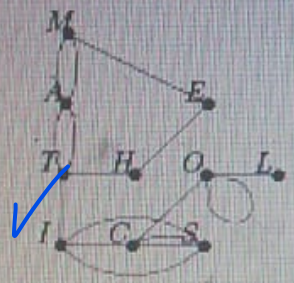
Question 4

Not yet answered

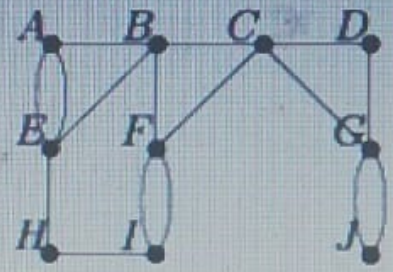
Marked out of 1.00

Flag question

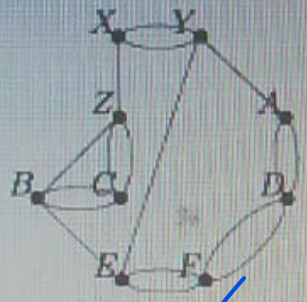
Which of these graphs have Hamiltonian Paths?



A



B



C

Select one:

- A only
- A and B only
- B and C only
- All graphs
- None of the above

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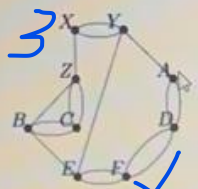
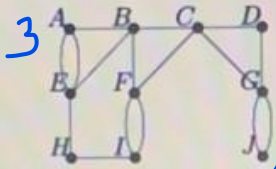
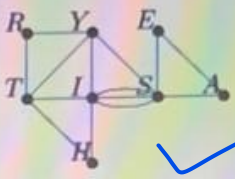
Which of these do not have Euler Circuits?



A



B



C

Select one:

- A and B only
- B and C only
- A and C only
- All graphs
- None of the above

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In how many ways can you select a group of 9 dogs out of 12 different dogs?

Select one:

- 202
- 220
- 1320
- 108
- None of the above

$$^{12}C_9 = \frac{12!}{9!\,3!}$$

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In how many ways can you select a group of 9 dogs out of 12 different dogs?

Select one:

- 202
- 220
- 1320
- 108
- None of the above

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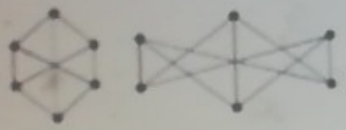
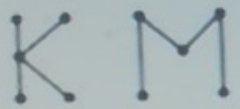
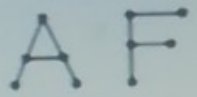
Which of the following paris are non isomorphic?



A



B



C

Select one:

- A and B only
- B and C only
- A and C only
- All are non isomorphic
- None of the above

Next page

NetExamn

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The sum of the first 16 terms of an Arithmetic Progressions whose first term and third term are 5 and 1

Select one:

- 600
- 640
- 680
- 690
- None of the above

swered
t of
estion

Given item A, which of the following would be the value of item B?

Item A: $\sum_{n=1}^{5} a_n = 30$

Item B: $\sum_{n=1}^{5} 3a_n - 2$

$3 \times \sum_{n=1}^{5} a_n - 2$

$3 \times 30 - 2$

88

Select one:

- 90
- 78
- 28
- 88
- None of the above

Next page

NetExam

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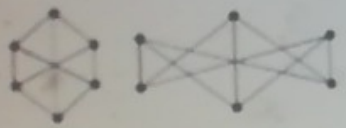
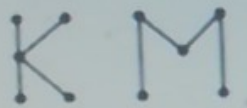
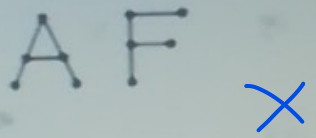
Which of the following paris are non isomorphic?



A



B



C

Select one:

- A and B only
- B and C only
- A and C only
- All are non isomorphic
- None of the above

no of degree - 4
no of edge - 3

Next page

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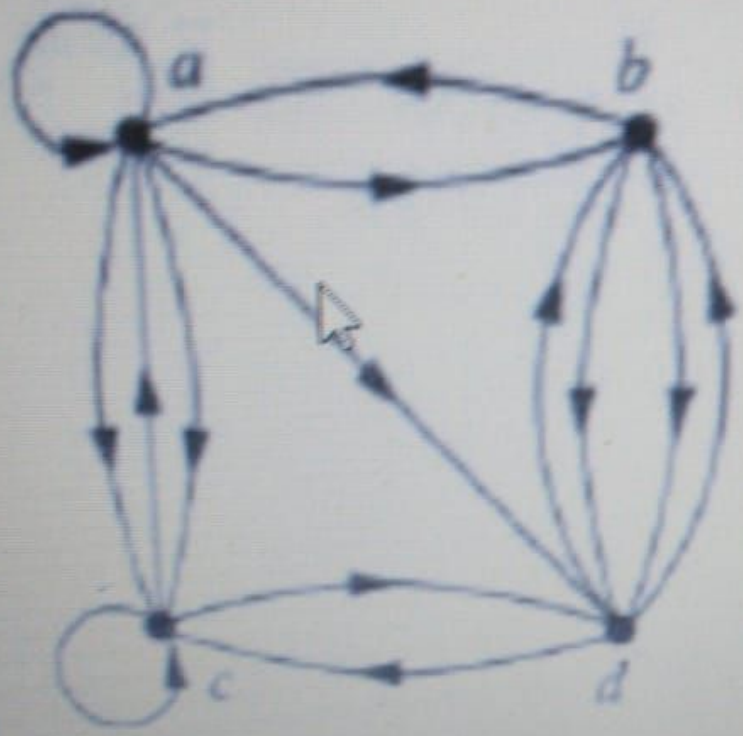
Consider the following Directed G



Number of Edges = : 14 ✓

Total Indegree = : 14 ✓

Total Outdegree = : 14 ✓

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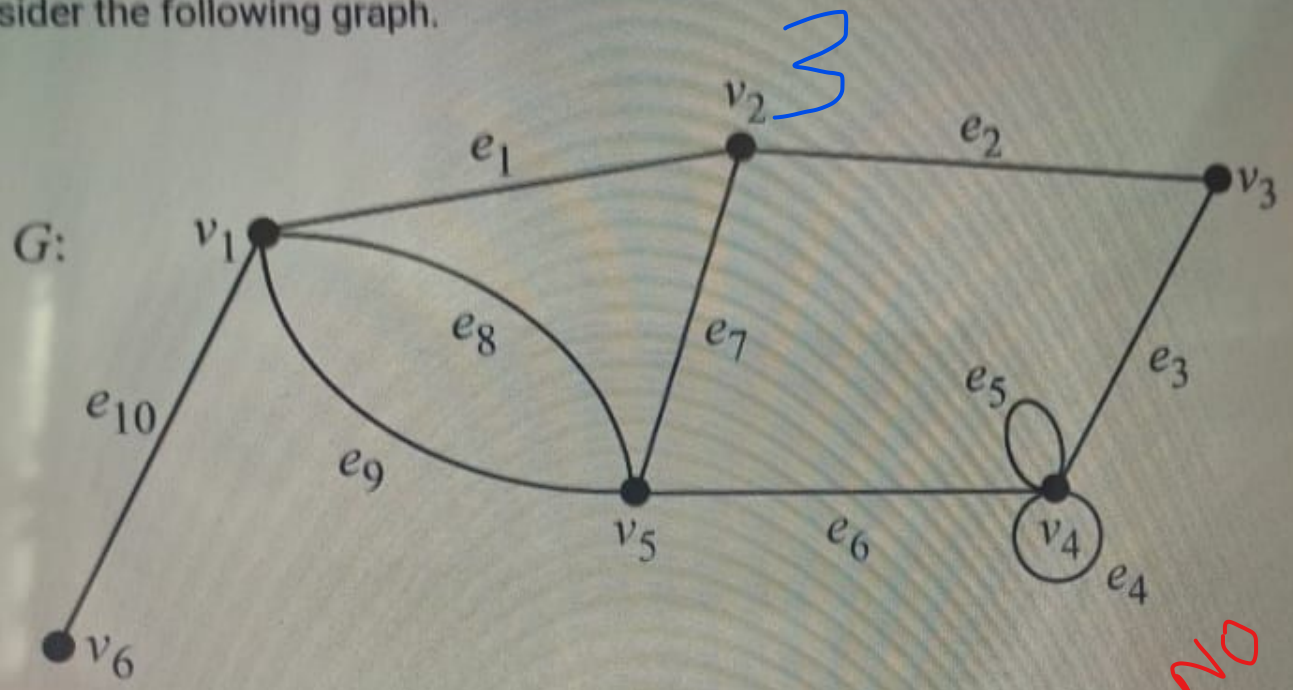
Question 6

Not yet answered

Marked out of 4.00

Flag question

Consider the following graph.



Determine whether the above graph has the followings.

Hamilton Path Choose...

Hamilton Circuit Choose...

Euler Path Choose...

Quiz navi

1 2 3

8 9 10

15 16 17

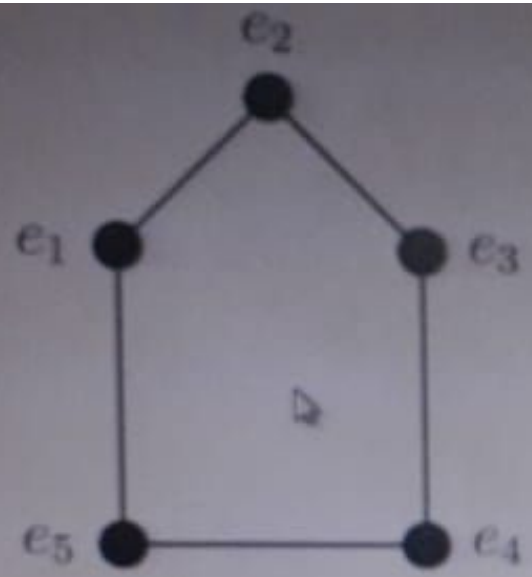
22 23 24

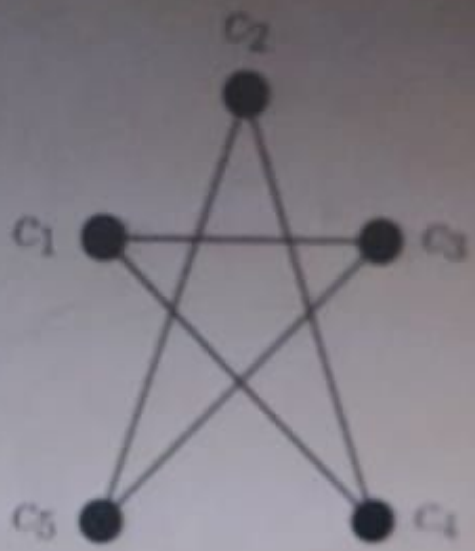
29 30 31

Finish attempt ...

Time left 1:05:35

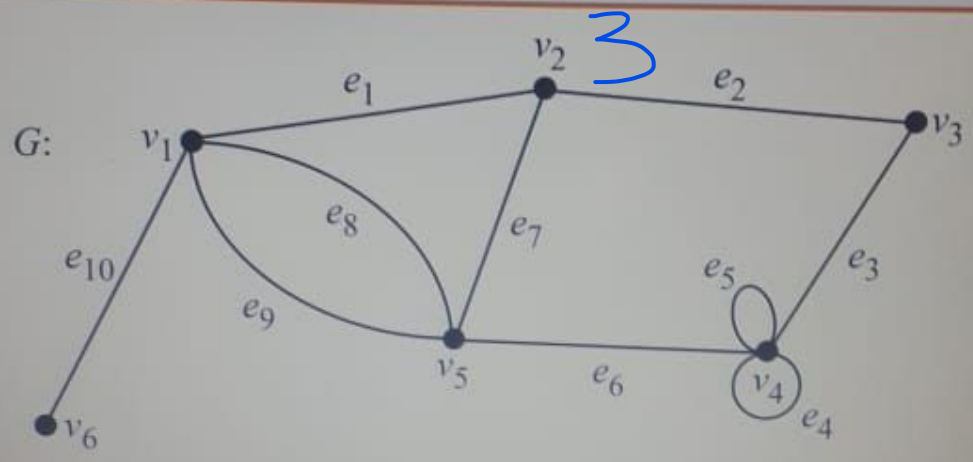
REDMI NOTE 8 PRO
AI QUAD CAMERA





Select one:

- Two graphs are isomorphic
- Two graphs are not isomorphic
- The two graphs have different degree sequences
- None of the above



3

1

Determine whether the above graph has the followings.

Hamilton Path	Choose...	yes
Hamilton Circuit	Choose...	no
Euler Path	Choose...	yes
Euler Circuit	Choose...	no

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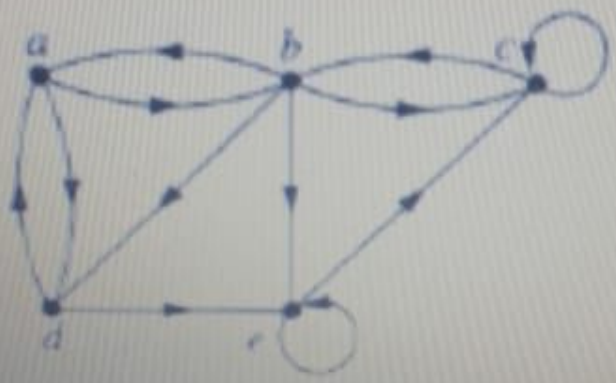
Consider the following Directed Graph.



Number of Edges = : 12

Total Indegree = : 12

Total Outdegree = : 12

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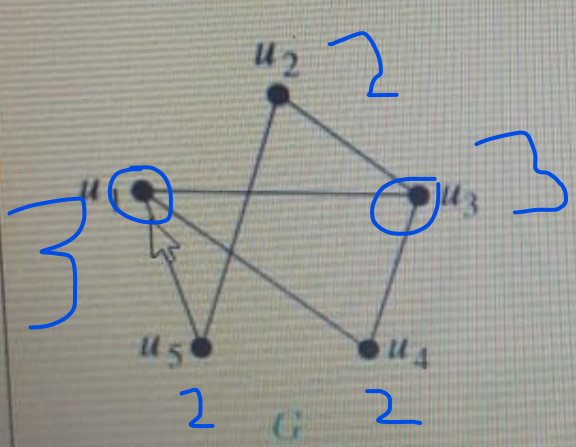
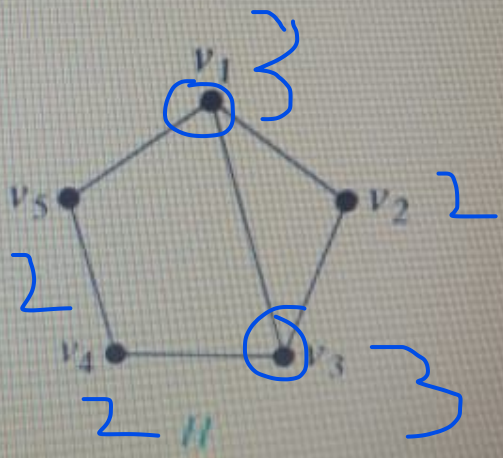
What is the correct statement about the following 2





Select one:

- Two graphs are isomorphic
- Two graphs are not isomorphic
- The two graphs have different degree sequences
- None of the above

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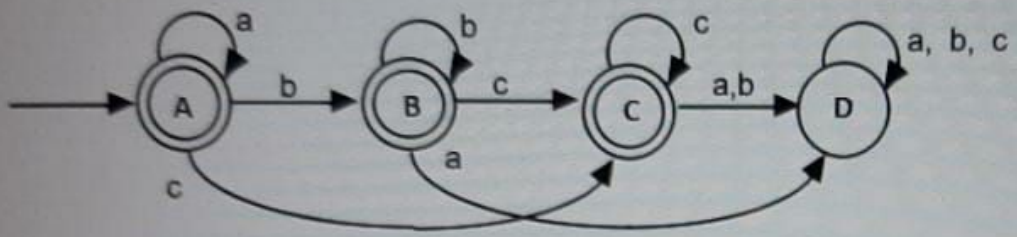
Question 1

Not yet answered

Marked out of 4.00

Flag question

Consider the following finite state Machine A.



What is the initial State? A

Choose...

To what state does A go if abcacbac input to A in sequence starting from the initial state? D

Choose...

Find N(C, a) D

Choose...

Find N(D, b) D

Choose...

Next page

Quiz navigation

1 2 3 4 5 6 7
8 9 10 11 12 13 14
15 16 17 18 19 20 21
22 23 24 25 26 27 28
29 30 31 32

Finish attempt ...

Time left 1:59:30

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Question 1

Not yet answered

Marked out of 0

Flag question

Consider the following degree sequence.

6, 4, 2, 0 =12

Is it possible to draw a graph with the above degree sequence?	Yes
Does this graph have an Euler Path?	No
Does this graph have an Euler circuit?	Yes
How many edges are in the above graph?	6

total degree even

not 2 odd degree

all even and 0 is not edge

total degree = 2 * edges

Next page

Quiz

1 2 8 9 16 22 23 29 30

Finish attempt

Time left

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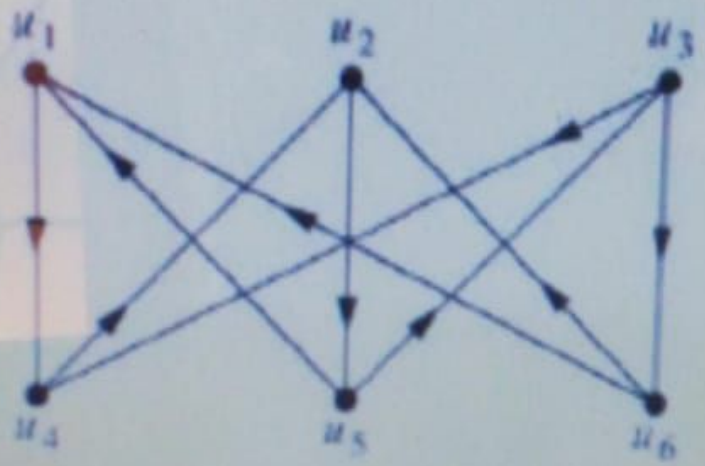
Consider the following Directed Graph.



Number of Edges = : 9

Total Indegree = : 9

Total Outdegree = : 9

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Consider the following degree sequence.

7, 6, 5, 4, 4, 2, 2 T.D = 30

Is it possible to draw a graph with the above degree sequence?	No	yes
Does this graph have an Euler Path?	Choose...	yes
Does this graph have an Euler circuit?	Choose...	no
How many edges are in the above graph?	Choose...	15

2 degree vertex odd the Euler circuit

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

Find x and y.

$$\begin{bmatrix} 2 & -4 \\ 3 & -5 \end{bmatrix} \begin{bmatrix} x \\ y \end{bmatrix} = \begin{bmatrix} -10 \\ -11 \end{bmatrix}$$

|A| = -10 - (-12)
=2

Answer for |A| Choose... 2

Answer for a Choose... -5

Answer for b Choose... 4

Answer for c Choose... -3

Answer for d Choose... 2

Answer for x Choose... 3

Answer for y Choose... 3

Ca = -5 -3
4 2

cT = -5 4 = adj A
-3 2

A^-1 = -5/2 2
-3/2 1

x=a-1.b

$$\begin{bmatrix} X \\ Y \end{bmatrix} = \begin{bmatrix} -5/2 & 2 \\ -3/2 & 1 \end{bmatrix} \begin{bmatrix} -10 \\ -11 \end{bmatrix}$$

Consider the following finite state Machine A.

What is the initial State? s0

To what state does A go if 100101001 input to A in sequence starting from the initial state? s1

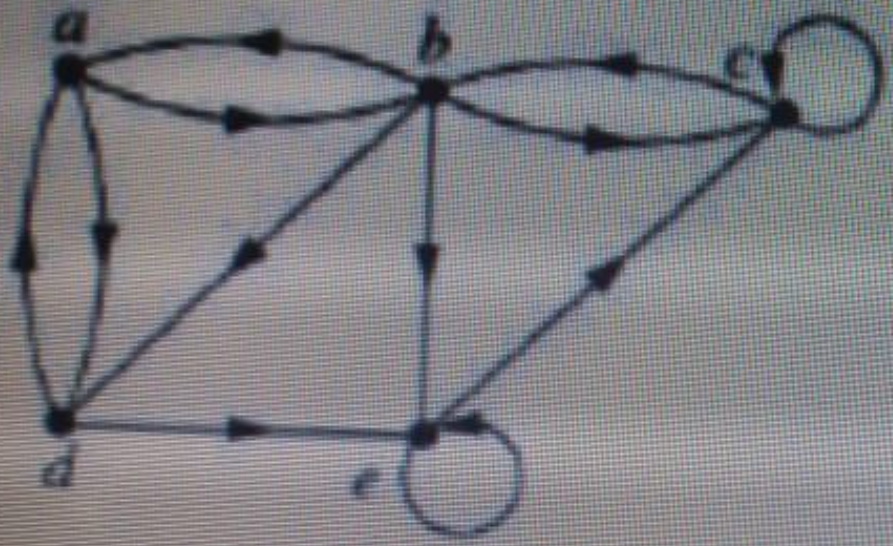
Find N(s1, 0) s0

Find N(S2, 0) s0

Choose...
Choose...
S0
S1
S3
S2

Choose...

Consider the following Directed Graph.



Number of Edges = : 12

Total Indegree = : 12

Total Outdegree = : 12