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Flag question

Following adjacency matrix represents an undirected graph.

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

Find the following.

Number of loops 3

Number of edges 11

Number of vertices 4

Total degree 22

Question 15

Not yet answered

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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 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...

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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...

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Finish attempt ...

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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...

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Following adjacency matrix represents an undirected gra

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

Find the following.

Number of loops	2
Number of edges	10
Number of vertices	4
Total degree	Choose...

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tion 5

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Solve the equation A = B when,

$$A = \begin{bmatrix} x & 1 & 2 \\ 0 & x^2 - y & 3 \end{bmatrix} \text{ and } B = \begin{bmatrix} 1 & 1 & 2 \\ 0 & 2 & 3 \end{bmatrix}.$$

Select one:

- x = -1 , y = 1
- x = -2 , y = - 2
- x = 1 , y = - 1
- x = 2 , y = - 2
- None of the above

Machine View Input Devices Help

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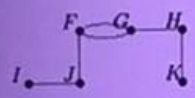
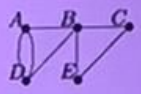
g question

Which of these graphs have Euler Paths?

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



A

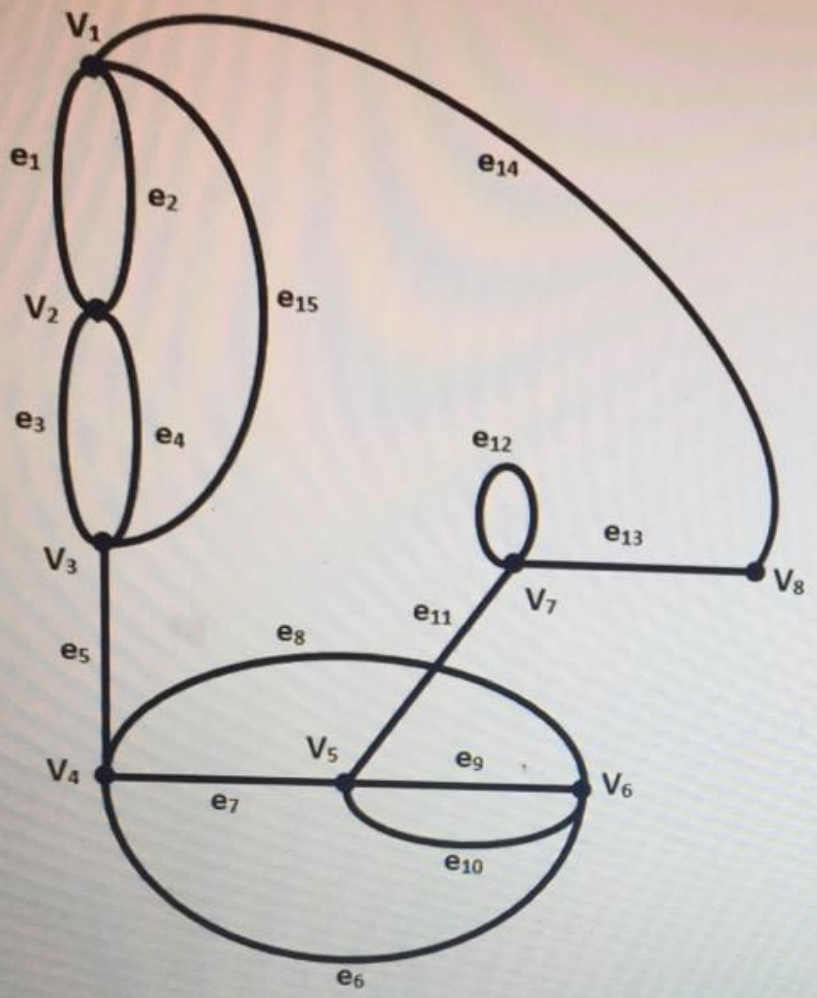


B

C

Select one:

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



Select the correct Hamilton circuit. Choose...

Select the correct Hamilton path. Choose...

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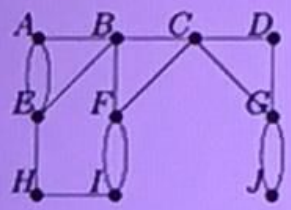
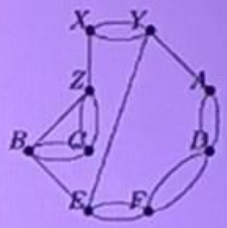
Which of these have Hamiltonian Circuits?

A



B



C

Select one:

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

Question 01 (20 marks)

(i) Find an equation of the tangent line to the curve $y = x^3 + 2x$ at the point (2,12).

(4 m

(ii) Find the length of the subtending arc when $\theta = 60^\circ$ and $r = 5$. (4 marks

(iii) Find the indefinite integral $\int (x^3 + 6x - 2)dx$. (4 marks)

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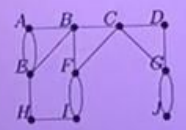
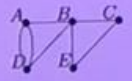
Which of these do not have Euler Circuits?



A

B



C

Select one:

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

Next page

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Question 8

Not yet answered

Marked out of 1.00

Flag question

Which of the following pairs are isomorphic?

A B C

Select one:

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

Finish

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Next page

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Question 8

Not yet answered

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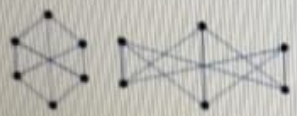
Flag question

Which of the following pairs are isomorphic?



A

B

C

Select one:

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

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Question 8

Not yet answered

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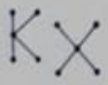
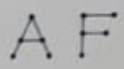
Flag question

Which of the following pairs are isomorphic?

A



B



C

Select one:

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

Solve the equation A = 2B when,

$$A = \begin{bmatrix} x & 1 & 2 \\ 0 & x^2 - y & 3 \end{bmatrix} \text{ and } B = \begin{bmatrix} 1 & 1/2 & 1 \\ 0 & 1 & 3/2 \end{bmatrix}.$$

Select one:

- x = -1 , y = 1
- x = -2 , y = - 2
- x = 1 , y = - 1
- x = 2 , y = 2
- None of the above

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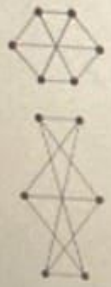
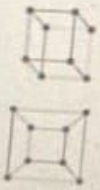
Which of the following pair of graphs are isomorphic?



A

B



C

Select one:

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

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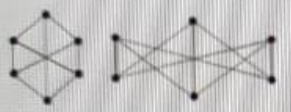
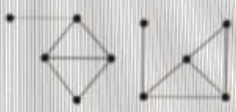
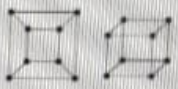
Which of the following pairs are isomorphic?



A



B



C

Select one:

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

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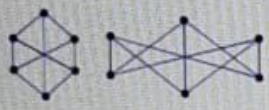
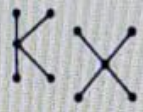
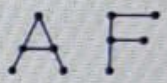
Which of the following pairs are non isomorphic?



A



B



C

Select one:

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

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Question 7

Not yet answered

Marked out of 1.00

Flag question

Find the product of the following 2 matrices.

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

Select one:

- $\begin{bmatrix} -10 & -20 \\ 10 & -16 \\ 18 & -24 \end{bmatrix}$
- $\begin{bmatrix} -15 & 5 \\ 18 & -6 \\ 0 & 0 \end{bmatrix}$
- $\begin{bmatrix} -8 & 14 \\ 33 & 6 \\ -24 & -60 \end{bmatrix}$
- $\begin{bmatrix} -8 & 14 \\ 33 & 6 \\ -24 & 6 \end{bmatrix}$
- None of the above

Question 8

Not yet answered

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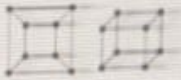
Flag question

Which of the following pairs are isomorphic?

A

B



C

Select one:

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

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Question 8

Not yet answered

Marked out of 1.00

Flag question

Which of the following pairs are non isomorphic?

A

B

C

Select one:

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

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Find the following product.

$$\begin{bmatrix} 0 & 2 \\ -2 & -5 \end{bmatrix}\begin{bmatrix} 6 & -6 \\ 3 & 0 \end{bmatrix}$$

Select one:

- $\begin{bmatrix} -30 & 24 \\ 15 & -12 \end{bmatrix}$
- $\begin{bmatrix} 6 & 0 \\ -27 & 12 \end{bmatrix}$
- $\begin{bmatrix} -5 & -10 \\ 8 & 13 \end{bmatrix}$
- $\begin{bmatrix} -14 & -3 \\ -19 & 22 \end{bmatrix}$
- None of the above

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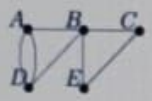
Which of these graphs have Hamiltonian Paths?

A



B

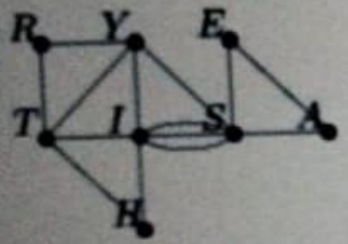
C

Select one:

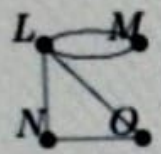
- A and B only
- B and C only
- A and C only
- All graphs
- None of the above

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

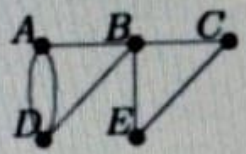
(Hint: A theorem for Euler paths can be used.)



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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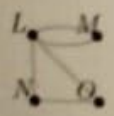
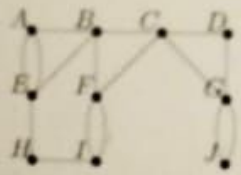
question

Which of these have Hamiltonian Circuits?



A



B

C

Select one:

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

Question 2

Not yet answered

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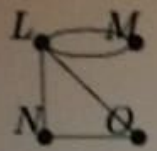
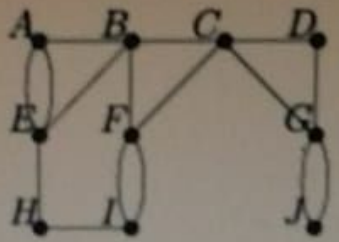
Flag question

Which of these have Euler Paths?

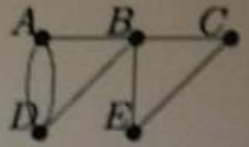
(Hint: A theorem for Euler paths can be used.)



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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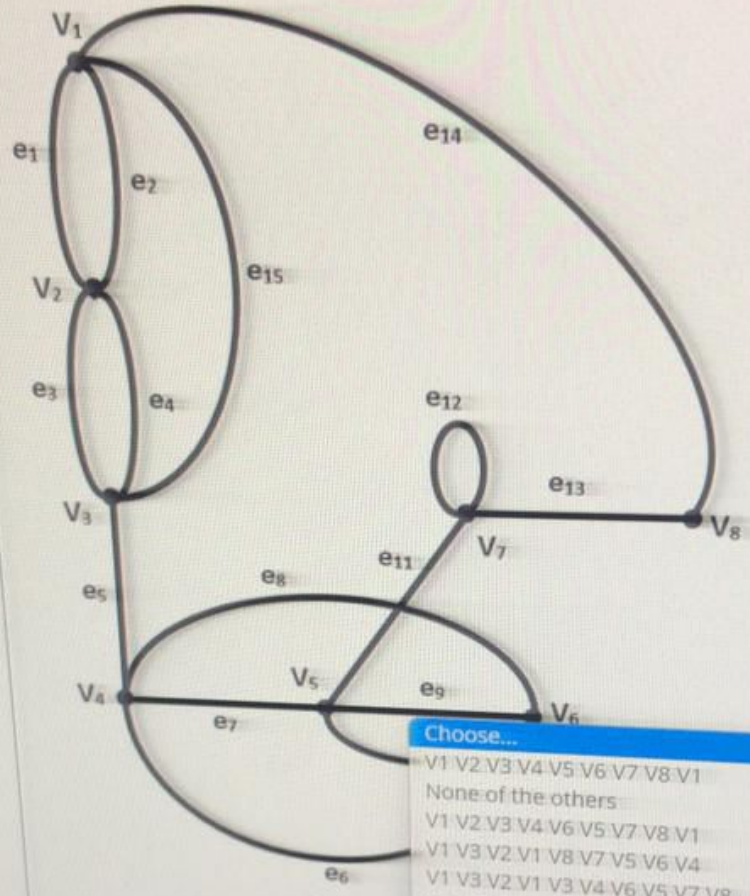
For the given graph.



Choose...
V1 V2 V3 V4 V5 V6 V7 V8 V1
None of the others
V1 V2 V3 V4 V6 V5 V7 V8 V1
V1 V3 V2 V1 V8 V7 V5 V6 V4
V1 V3 V2 V1 V3 V4 V6 V5 V7 V8
V5 V6 V4 V3 V2 V1 V8 V7
V1 V8 V7 V5 V4 V3 V2

Select the correct Hamilton circuit: Choose...

Select the correct Hamilton path: Choose...

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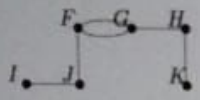
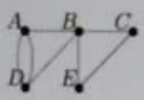
Which of these graphs have Euler Paths?

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



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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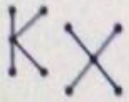
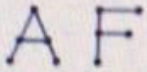
Which of the following pairs are isomorphic?

A



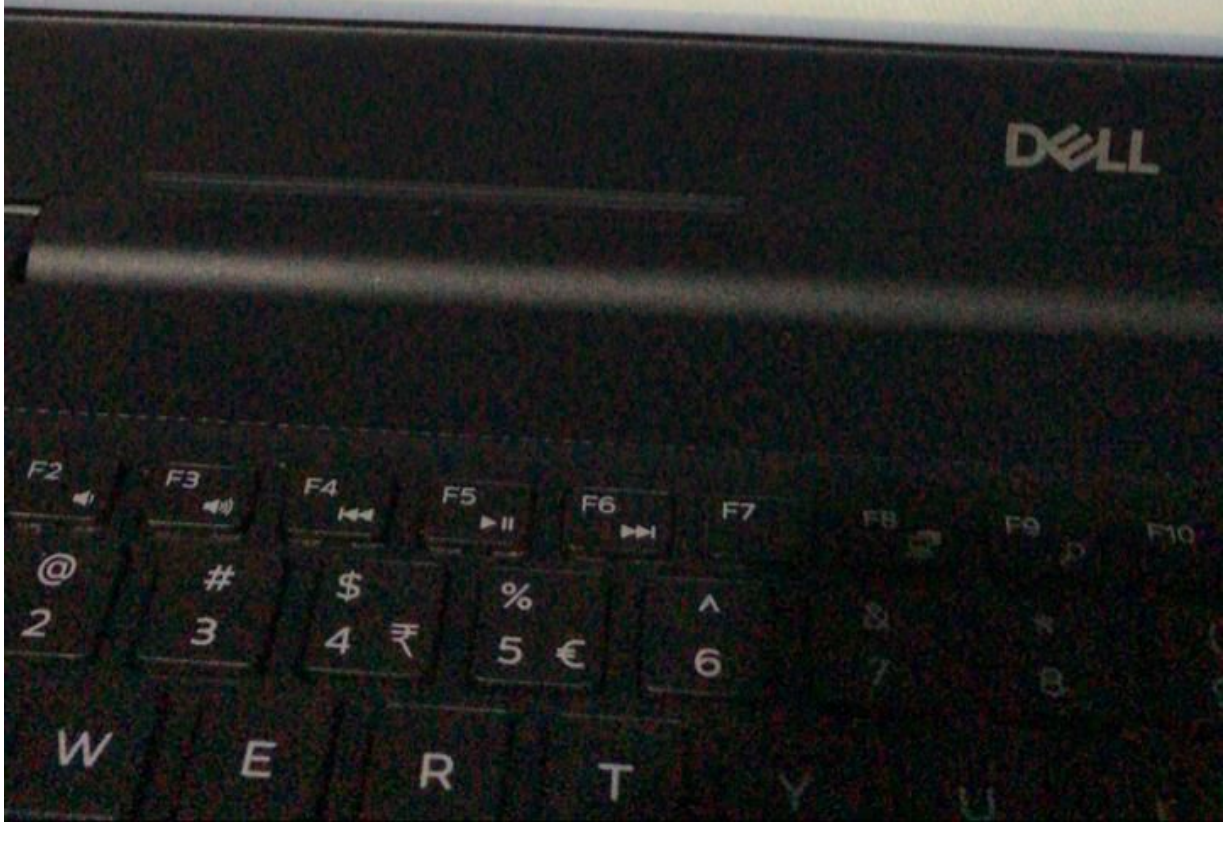
B



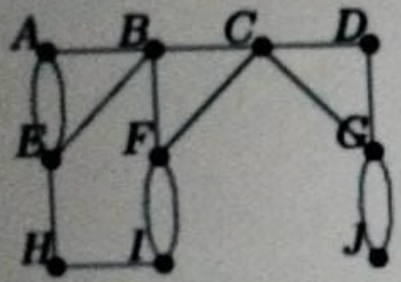
C

Select one:

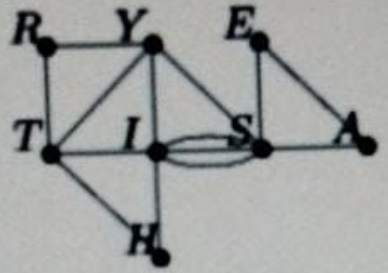
- A and B only
- B and C only
- A and C only
- All are isomorphic
- None of the above



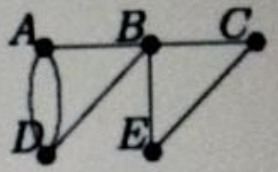
Which of these have Euler Circuits?



A



B



C

Select one:

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

dle

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5

answered

out of

question

Solve the equation A = B when,

$$A = \begin{bmatrix} x & 1 & 2 \\ 0 & x^2 - y & 3 \end{bmatrix} \text{ and } B = \begin{bmatrix} 2 & 1 & 2 \\ 0 & 2 & 3 \end{bmatrix}.$$

Select one:

- x = -1 , y = 1
- x = -2 , y = - 2
- x = 1 , y = - 1
- x = 2 , y = - 2
- None of the above

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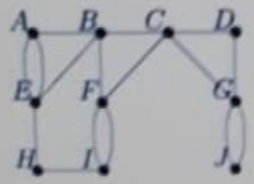
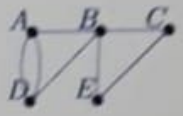
Which of these do not have Euler Circuits?

A



B



C

Select one:

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

Question 2

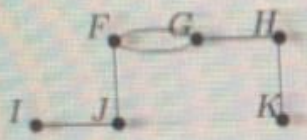
Not yet answered

Marked out of 1.00

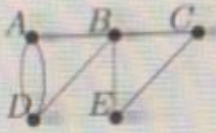
Flag question

Which of these graphs have Euler Paths?

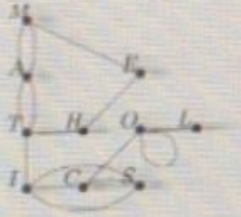
(Hint: A theorem for Euler paths can be used.)



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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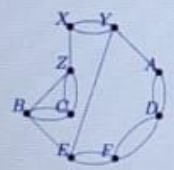
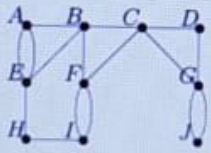
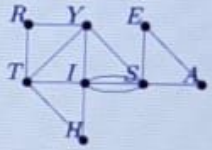
Which of these do not have Euler Circuits?



A



B



C

Select one:

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

Moodle

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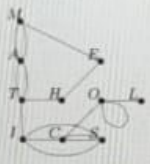
Question 4

Not yet answered

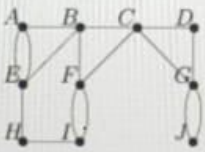
Marked out of 1.00

Flag question

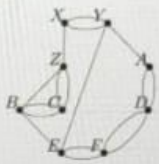
Which of these graphs have Hamiltonian Paths?



A



B



C

Select one:

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