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A graph G is called a if it is a connected acyclic graph ?

- 1) Tree
- 2) . Not a graph
- 3) Regular graph
- 4) Cyclic graph

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In the Graph Theory, a graph need to have a minimum of _____ nodes and _____ edges.

☐ 1) 1;1

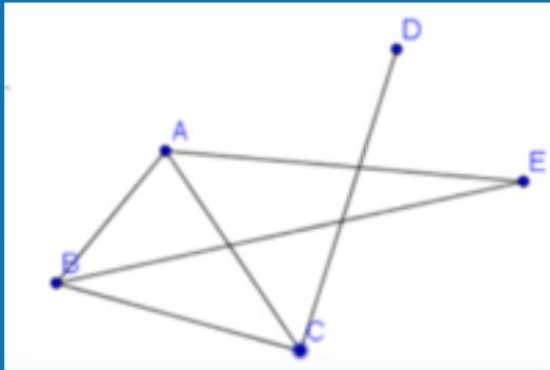
☐ 2) 1;0

☐ 3) 2;2

☐ 4) 2;1

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Which describes the edges of the graph?



☐ 1) $\{A,B\}, \{A,C\}, \{A, E\}, \{B,C\}, \{B,E\}$

☐ 2) $\{A,B\}, \{A,C\}, \{A, E\}$

☐ 3) $\{A,B\}, \{A,C\}, \{A, E\}, \{B,C\}, \{B,E\}, \{C,D\}$

☐ 4) A, B, C, D, E

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If a connected graph G becomes disconnected by deleting only one edge, then that edge is called

- 1) Trail
- 2) Bridge
- 3) Path
- 4) node

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The maximum degree of any vertex in a simple graph with n vertices is

- ☒ 1) n
- ☒ 2) $2n-1$
- ☒ 3) $n+1$
- ☐ 4) $n-1$

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What is the degree of vertex D?



☐ 1) 3

☐ 2) 2

☐ 3) 1

☐ 4) 4

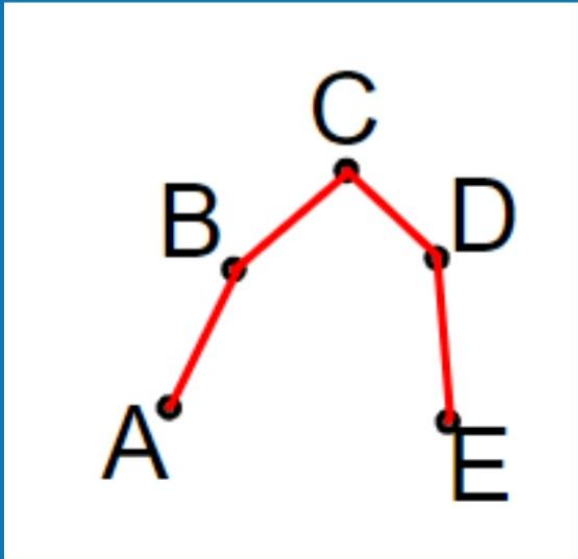
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If a graph has a number associated with each edge then the graph is called a ... ?

- 1) Weighted graph
- 2) Directed Graph
- 3) Network
- 4) Digraph

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Which vocabulary term describes the graph?



- ☐ 1) path
- ☐ 2) circuit
- ☐ 3) polygon
- ☐ 4) complete graph

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What is the number of edges present in a complete graph having n vertices?

- 1) n
- 2) $(n*(n-1))/2$
- 3) $(n*(n+1))/2$
- 4) $n+1$

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What is the degree of complete graph?

- ☐ 1) n
- ☐ 2) $n-1$
- ☐ 3) 1
- ☐ 4) 0

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A simple graph has no loops. What other property must a simple graph have?

- 1) It must have no multiple edges.
- 2) It must have at least one vertex.
- 3) It must be undirected.
- 4) It must be directed.

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If every vertex in G is connected with other vertices then graph is called

- 1) A complete graph
- 2) An empty graph
- 3) A bipartite
- 4) A cycle graph

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If in a graph multiple edges between the same set of vertices are allowed, it is called?

- 1) Simple graph
- 2) Hamiltonian Graphs
- 3) Euler Graphs
- 4) Multi graph

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A graph is a collection of.... ?

- 1) Equations
- 2) Row and columns
- 3) Vertices and edges

Question No: 15 / 15

What is Null Graph?

- 1) null graph has no odd vertex
- 2) null graph has no edges
- 3) null graph has no nodes
- 4) null graph has no even vertex