

Grading Guide and Comments

Section 7.2

6. (5 marks)
5 marks for getting the explanation correct; a multitude of explanations were acceptable, even though the most commonly used was the “Handshaking Theorem,” or Theorem 1 from the textbook.
2 marks were taken off from answers that assumed a *fully connected* graph (i.e. everyone shakes hands with every other person) Note that the total degree of the graph will always be even regardless of whether it is fully connected or not.
20. (5 marks)
2 marks for getting the number of edges (7) correct
3 marks for drawing a correct graph
1 mark was taken off for each node with the incorrect degree.
1 mark was also taken off if an extra node or edge was drawn.
Theoretically, for a simple graph there should not be any loops (i.e. edge from a node back to itself) however, since the question did not specifically state that the graph must be a simple graph, alternative solutions, which included loops, were accepted.
28. (5 marks)
5 marks for getting the graph correct
1 mark was taken off for each *pair* of missing edges
No marks were awarded if more than 16 processors were depicted.
Preferably, the 16 processors should be drawn in a “grid” to reflect the mesh network, but no marks were taken off for answers which did not include the “mesh.”

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Not yet available.