Discrete Structures

Fight for Survival

Dr. Mudassir Shabbir

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Graph Basics, Definitions, Terminology.

Why Graphs

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- Biological networks: interactions between different molecules, genes or proteins, in order to understand the biological systems and pathways.

GRAPH:

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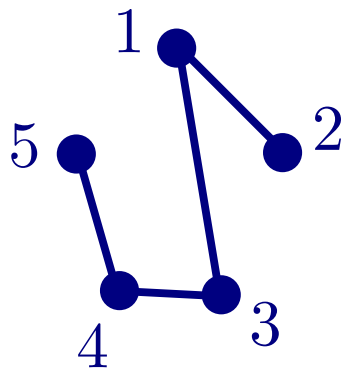

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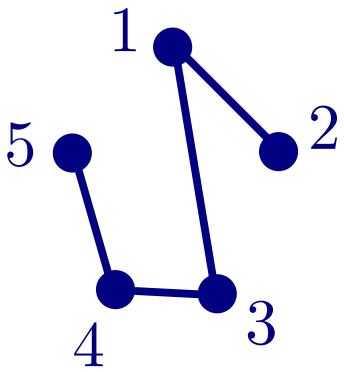

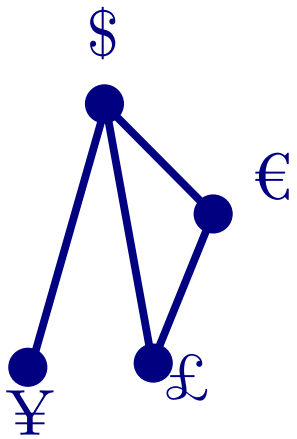

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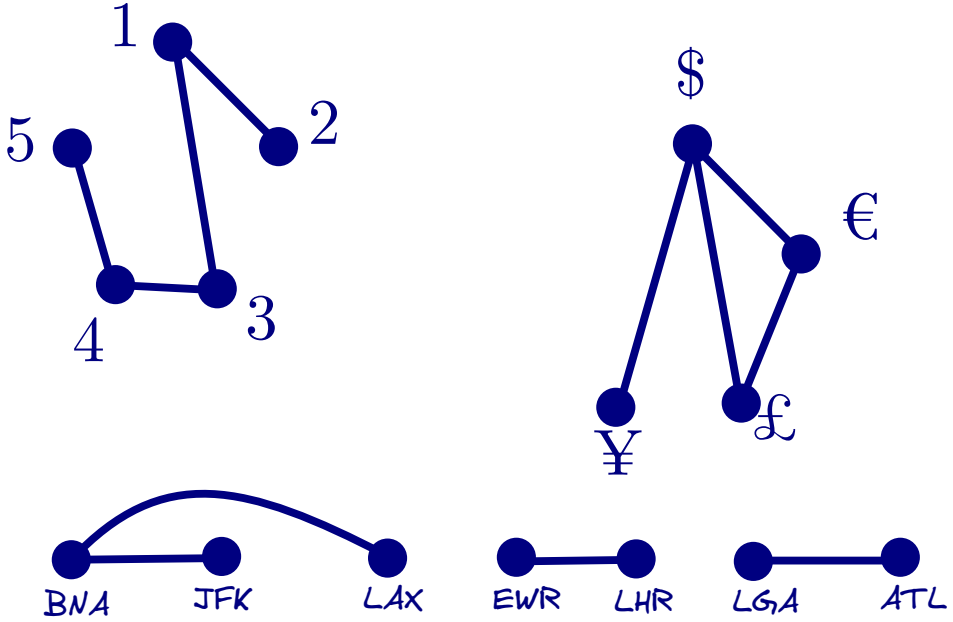

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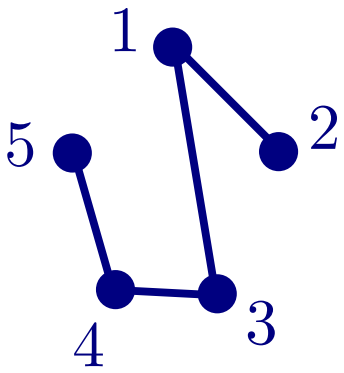
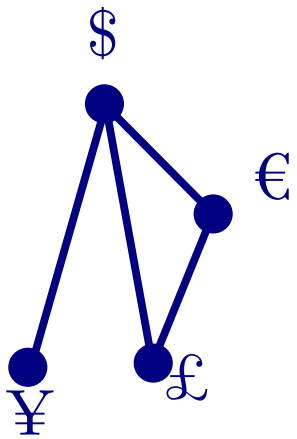
Vertex/Vertices





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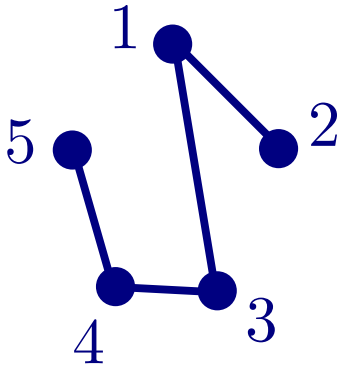
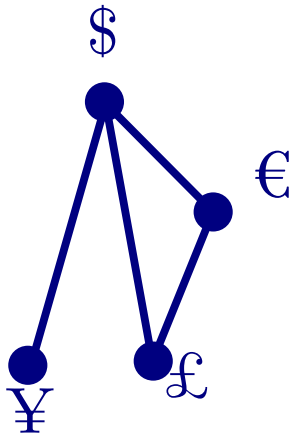
Edges

Vertex/Vertices





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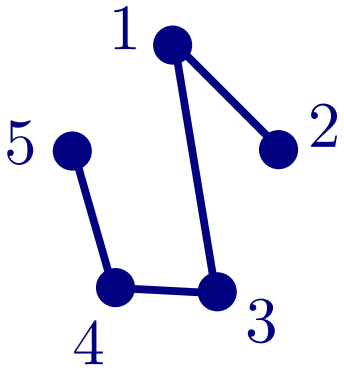

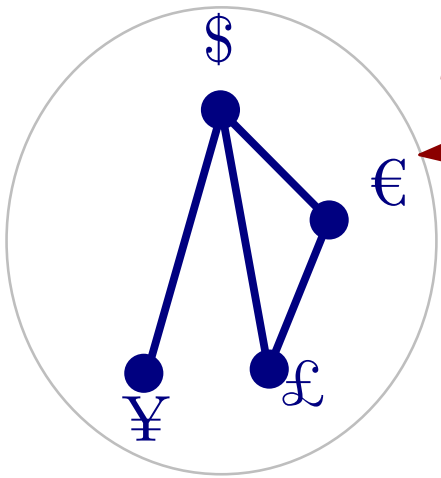

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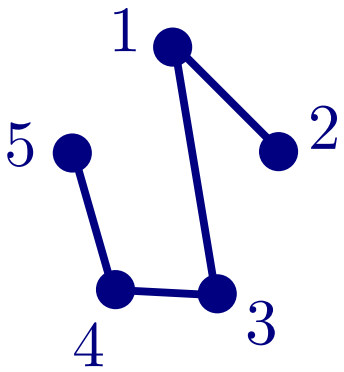

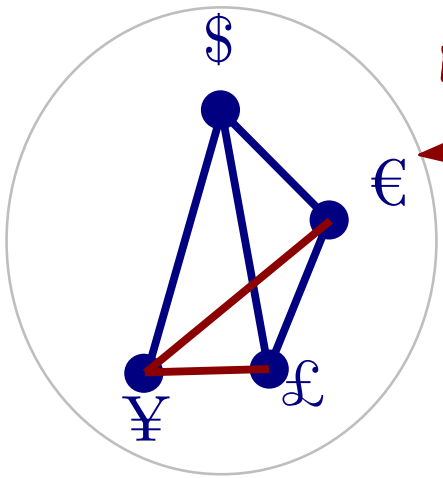

$= 6$

What is the maximum number of edges in this graph?

TOPHAPT Question

Total number of graphs on four vertices?