

Graphs and Coloring

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Lecture 7: Discrete Mathematical Modelling

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- ▶ For a *directed* graph we consider edges as ordered pairs.

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- ▶ $E = \{(1, 2), (1, 3), (2, 3), (2, 4)\}$.
- ▶ For an unordered graph, the order of the vertices in each edge does not matter.
- ▶ $G = \{V, E\}$ is a graph.