

7.1 Graph Theory

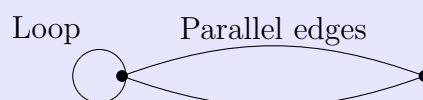
7.1.1 Terminology

Since we're introducing a new concept, Graph Theory, we need to go over the various terms so that we can communicate about these graphs properly.

- **Graph:** A graph is a type of diagram that contains *vertices* (aka nodes) and *edges*.



- **Node:** A vertex of the graph, drawn as a dot.
 - **Adjacent nodes:** Two nodes that are connected by an edge.
- **Edge:** A line that connects two nodes together.
 - **Parallel edges:** Two edges that have the same two endpoints.
 - **Loop:** An edge that begins and ends at the same node, creating a loop.



- **Walk:**
- **Trail:**
- **Cycle:**