Terminology, cont.

- A **walk** in $G = (V, E)$ is a sequence of vertices $v_1, v_2, \ldots, v_k$ s.t. $(v_i, v_{i+1}) \in E$ for all $i = 1, 2, \ldots, k-1$; note that vertices can be repeated.
- A **path** in $G = (V, E)$ is a path in which vertices cannot be repeated.
- A graph is **connected** if you can go between any two vertices via some path.
- A **component** in a graph is a maximal subgraph that is connected.
- A **cycle** in a graph is a path that starts and ends at the same node, and doesn't repeat any other node.
- An **acyclic graph** is a graph that has no cycles.
- A **tree** is a connected acyclic graph.