critical path

CIS 315
• this is a dag (directed acyclic graph) representing a schedule
• weights are time – job b must be done 4 minutes after job a
• topological sort is a – b – c – e – d
• longest path is the critical path …
• the shortest possible schedule
• can be found in linear time  O(V+E)
• similar to HW1 problem
negative weight back edges?

- negative weight indicates maximum time, job e must be done at most 15 minutes after job a
- this is ok since we are looking for longest path
- need Bellman-Ford to deal with positive weight cycle (which is bad in this context)