



**Figure 14.33** Stages of acyclic graph algorithm. Follows the same conventions as Figure 14.23

### 14.5.2 Theory of the Acyclic Shortest-path Algorithm

In an acyclic graph, the eyeball merely visits vertices in topological order.

An important application of topological sorting is its use in solving the shortest-path problem for acyclic graphs. The idea is as follows: Have the eyeball visit vertices in topological order.