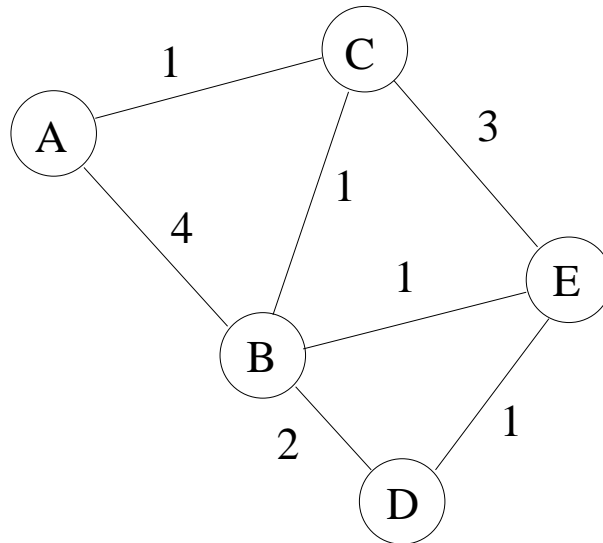All questions in this exercise refer to this network. The numbers represent link weights.

Explain different intermediate steps. There are some applets that calculate routing costs, but cut and paste from the output of these applets is not accepted as an answer. Nor just a set of tables, or other schematics. You need to show you understand what happens.

The points are given from the correct explanation only. Unexplained answers do not yield points.

Target: The student understands the functional principles of the major routing algorithms.

1. Use Dijkstra's (link state) algorithm to calculate the routing table for node **A**. Show intermediate steps, and take link weights into account.

2. Use Bellman-Ford (distance vector) algorithm to calculate the routing table for node **A**. Show intermediate steps, take link weights into account.

3. Show step-by step what happens to the routing table of **A** when the link **B**–**C** is suddenly cut off, when using

   (a) Dijkstra's algorithm
   (b) Bellman-Ford algorithm