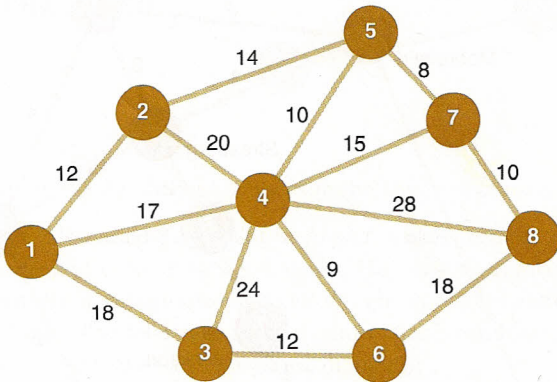


Determine the shortest path from node 1 in north Georgia to node 13 in Virginia and indicate the total mileage of the trail.

- Hard Rock Concrete Supply makes concrete at its plant in Centerville, Virginia, and delivers it to construction sites throughout the metropolitan Washington, DC, area. The following network shows the possible routes and distances (in miles) from the concrete plant to seven construction sites:



Determine the shortest route a concrete truck would take from the plant at node 1 to node 8 and the total distance for this route, using the shortest route method.

- George is camped deep in the jungle, and he wants to make his way back to the coast and civilization. Each of the paths he can take through the jungle has obstacles that can delay him, including hostile natives, wild animals, dense forests and vegetation, swamps, rivers and streams, snakes, insects, and mountains. Following is the network of paths that George can take, with the time (in days) to travel each branch: