

Four people, A, B, C, and D need to get across a river. The only way to cross the river is by an old bridge, which holds at most two people at a time. Being dark, they can't cross the bridge without a torch, of which they only have one. Each pair can only walk at the speed of the slower person. The need to get all of them across to the other side as quickly as possible.

A takes ten minutes to cross.

B takes five minutes to cross.

C takes two minutes to cross.

D takes one minute to cross.

What is the minimum time to get them all across?