Adam, Bill, Clare and Debbie (for no particular reason apart from they are A, B, C and D - suggestions for alternate names next time please!) and out walking one evening. It is getting late and they need to get some safely.

They come to rickety old wooden bridge across a river. The bridge is weak and only able to carry the weight of two of them at a time. Because they are in a rush and the light is fading they must cross in the minimum time possible and must carry a torch on each crossing. Luckily they have exactly one torch - but it cannot be thrown across the river, only carried back and forth.

Because of their different fitness levels and some minor injuries (make up random aliment and insert here) they can all cross at different speeds. Adam can cross in 1 minute, Bill in 2 minutes, Clare in 5 minutes and Debbie in 10 minutes.

Adam, the brains of the group thinks for a moment and declares that the crossing can be completed in 17 minutes. There is no trick. How is this done?

|  |  |
| --- | --- |
| Move | Time |
| (1) & (2) Cross with Torch | 2 |
| (1) Returns with Torch | 1 |
| (5) & (10) Cross with Torch | 10 |
| (2) Returns with Torch | 2 |
| (1) & (2) Cross with Torch | 2 |
|  | 17 |