The hobbits and the orcs

Literature



The Hobbits and the Orcs The process of getting the hobbits and the orcs to the other side of theriver while never allowing the number of orcs to outnumber the hobbits on either side was solved as follows:

Two orcs go across the river, one orc comes back

(leaves one orc)

Two orcs go across the river, one orc comes back

(leaves two orcs)

Two hobbits go across the river, one orc and one hobbit come back

(leaves one orc and one hobbit)

Two hobbits go across the river, one orc comes back

(leaves three hobbits)

Two orcs go across the river, one orc comes back

(leaves one orc and three hobbits)

Two orcs go across the river, all are across

This was kind of a hard problem to do because I kept coming to the same conclusion, that there was no way to get them all across without having one of them jump out and swim, which would have been breaking the rules. What was most helpful was when I got out three large paper clips to represent the orcs and three small paperclips to represent the hobbits.

Given the particular situation, I interpreted the rules to mean that there could never be more orcs on either side of the river than hobbits, this included the orc, if any, in the boat. This continued to be a problem for me regardless of the combinations I sent across the river on the third trip. Trying to determine who to send back continued to leave me with too many orcs.

The idea to send two characters back was like an epiphany. Once this

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occurred to me, it didn't matter where I started or which characters started on which side, it always worked.