Problem Solving

A Cat, a Parrot, and a Bag of Seed:

A man finds himself on a riverbank with a cat, a parrot and a bag of seed. He needs to transport all three to the other side of the river in his boat. However, the boat has room for only the man himself and one other item (either the cat, parrot or seed). In his absence, the cat could eat the parrot, and the parrot would eat the bag of seed. Show how he can get all the passengers to the other side, without leaving the wrong ones alone together.

Problem 1: A cat, a parrot, and bag of seed.

1. There is a man who needs to cross the river. He needs to take three items (a cat, a parrot, and bag of seed.) He can only take one item at a time. If he leaves the parrot and the cat together, the cat will eat the parrot. If he leaves the parrot with the bag of seed, the parrot will eat the seed. He needs to find a way to cross the river without losing the cat, parrot, or seed.
2. The constraints are as follows:
   1. Cat will eat the parrot if left alone
   2. Parrot will eat the seed if left alone
   3. Only the man and one item can cross at a time.