Missionaries and Cannibals

1. In pairs or teams of three:

2. Go to http://www.learn4good.com/games/puzzle/boat.htm and see if you can get all the missionaries and cannibals across the river. Take about 10 minutes.

3. Formulate the problem precisely, making only those distinctions necessary to ensure a valid solution. Draw a diagram of the complete state space. (AIMA, problem 3.9a, p 115)
Description

- M is # of missionaries, C is # of cannibals, B is L or R for position of boat. right[M,C]
- Initial State: right[3,3], B[R]
- Goal State: right[0,0]
- Actions
  - [0,1] or [1,1] or [1,0] or [2,0] or [0,2] go left
  - [0,1] or [1,1] or [1,0] or [2,0] or [0,2] go right
- Transition: update # missionaries and # cannibals on R, toggle boat
Text