1. A. a man needs to get across a river on a boat. He has 3 things with him but the boat only fits himself and one other thing. What should he leave behind? What order should he take items?

B. I have never heard of a cat eating seeds

C. The goal is to get the man and all his things across the river, intact.

1. A. The sub goals are to figure out which combination works best.

a. Cat and seed?

b. Cat and bird?

c. Bird and seed?

B. The constraints are that some combination of items will result in one pet eating the other or the seed.

3. A. Cat and seed- seems like correct choice

Cat and bird- leave cat or bird in cage so cat doesn’t eat bird

Bird and seed- put bird in cage so bird doesn’t eat seed.

4. A. Each solution does seem to meet the goals.

B. Each solution is different for every case.

5.A. I choose the solution of putting one animal in a cage while the man goes across with the seed first.