1) Define the problem

a) The man must get the cat, parrot and seed to the other side of the river carrying one item at a time without leaving the cat and parrot alone together.

b) The man will have to take multiple trips.

c) The goal is to get the man, cat, parrot, and seed to the other side of the river with the outlined constraints.

2) Break the problem apart.

a) I can only take one item across at a time

b) I cannot leave the cat and parrot together alone.

c) I cannot leave the parrot and seed together alone.

3) Identify potential solutions

a) I will take a total of seven trips

b) I take the parrot first and return to pick up the cat.

c) I drop off the cat and return with the parrot.

d) I drop off the parrot and return with the seed.

e) I return to get the parrot and arrive back at the other side with all three items.

4) Evaluate each potential solution

a) Does each solution meet the goals?

b) Will each solution work for ALL cases?

5) Choose a solution and develop a plan to implement it.

a) Explain the solution in full.

b) Describe some test cases you tried out to make sure it works. (You can include

drawings and diagrams as part of your explanation as long as they are clearly

communicating the solution)