DFS/BFS	Missionaries	TowersOfHanoi	FarmerFox
Length of Solution Path	9/7	40/18	7/7
Number of nodes expanded	10/10	40/70	9/9

Solution Path:

Missionaries:

DFS

[[3,3], [0, 0]] boat is on the left.

[[2,2], [1, 1]] boat is on the right.

[[3,2], [0, 1]] boat is on the left.

[[0,2], [3, 1]] boat is on the right.

[[2,2], [1, 1]] boat is on the left.

[[1,1], [2, 2]] boat is on the right.

[[3,1], [0, 2]] boat is on the left.

[[0,1], [3, 2]] boat is on the right.

[[1,1], [2, 2]] boat is on the left.

[[0,0], [3, 3]] boat is on the right.

BFS

[[3,3], [0, 0]] boat is on the left.

[[2,2], [1, 1]] boat is on the right.

[[3,2], [0, 1]] boat is on the left.

[[1,1], [2, 2]] boat is on the right.

[[3,1], [0, 2]] boat is on the left.

[[0,1], [3, 2]] boat is on the right.

[[1,1], [2, 2]] boat is on the left.

[[0,0], [3, 3]] boat is on the right.

TowersOfHanoi:

DFS

[[4, 3, 2, 1] ,[] ,[]]

[[4, 3, 2] ,[1] ,[]]

[[4, 3] ,[1] ,[2]]

[[4, 3, 1] ,[] ,[2]]

[[4, 3] ,[] ,[2, 1]]

[[4] ,[3] ,[2, 1]]

[[4, 1] ,[3] ,[2]]

[[4] ,[3, 1] ,[2]]

[[4, 2] ,[3, 1] ,[]]

[[4, 2, 1] ,[3] ,[]]

[[4, 2] ,[3] ,[1]]

[[4] ,[3, 2] ,[1]]

[[4, 1] ,[3, 2] ,[]]

[[4] ,[3, 2, 1] ,[]]

[[] ,[3, 2, 1] ,[4]]

[[1] ,[3, 2] ,[4]]

[[] ,[3, 2] ,[4, 1]]

[[2] ,[3] ,[4, 1]]

[[2, 1] ,[3] ,[4]]

[[2] ,[3, 1] ,[4]]

[[] ,[3, 1] ,[4, 2]]

[[1] ,[3] ,[4, 2]]

[[] ,[3] ,[4, 2, 1]]

[[3] ,[] ,[4, 2, 1]]

[[3, 1] ,[] ,[4, 2]]

[[3] ,[1] ,[4, 2]]

[[3, 2] ,[1] ,[4]]

[[3, 2, 1] ,[] ,[4]]

[[3, 2] ,[] ,[4, 1]]

[[3] ,[2] ,[4, 1]]

[[3, 1] ,[2] ,[4]]

[[3] ,[2, 1] ,[4]]

[[] ,[2, 1] ,[4, 3]]

[[1] ,[2] ,[4, 3]]

[[] ,[2] ,[4, 3, 1]]

[[2] ,[] ,[4, 3, 1]]

[[2, 1] ,[] ,[4, 3]]

[[2] ,[1] ,[4, 3]]

[[] ,[1] ,[4, 3, 2]]

[[1] ,[] ,[4, 3, 2]]

[[] ,[] ,[4, 3, 2, 1]]

BFS

[[4, 3, 2, 1] ,[] ,[]]

[[4, 3, 2] ,[1] ,[]]

[[4, 3] ,[1] ,[2]]

[[4, 3, 1] ,[] ,[2]]

[[4, 3] ,[] ,[2, 1]]

[[4] ,[3] ,[2, 1]]

[[4, 1] ,[3] ,[2]]

[[4, 1] ,[3, 2] ,[]]

[[4] ,[3, 2, 1] ,[]]

[[] ,[3, 2, 1] ,[4]]

[[1] ,[3, 2] ,[4]]

[[] ,[3, 2] ,[4, 1]]

[[2] ,[3] ,[4, 1]]

[[2, 1] ,[3] ,[4]]

[[2, 1] ,[] ,[4, 3]]

[[2] ,[1] ,[4, 3]]

[[] ,[1] ,[4, 3, 2]]

[[1] ,[] ,[4, 3, 2]]

[[] ,[] ,[4, 3, 2, 1]]

FarmerFox:

DFS

[[1,1,1], [0,0,0]] farmer is on the left.

[[0,1,1], [1,0,0]] farmer is on the right.

[[0,1,1], [1,0,0]] farmer is on the left.

[[0,0,1], [1,1,0]] farmer is on the right.

[[1,0,1], [0,1,0]] farmer is on the left.

[[1,0,0], [0,1,1]] farmer is on the right.

[[1,0,0], [0,1,1]] farmer is on the left.

[[0,0,0], [1,1,1]] farmer is on the right.

BFS

[[1,1,1], [0,0,0]] farmer is on the left.

[[0,1,1], [1,0,0]] farmer is on the right.

[[0,1,1], [1,0,0]] farmer is on the left.

[[0,1,0], [1,0,1]] farmer is on the right.

[[1,1,0], [0,0,1]] farmer is on the left.

[[1,0,0], [0,1,1]] farmer is on the right.

[[1,0,0], [0,1,1]] farmer is on the left.

[[0,0,0], [1,1,1]] farmer is on the right.