

Chickens and Foxes Graph

Red states are illegal
Green states are legal

Flip the third number
Remove a chicken if there is one on the left side
Remove two chickens if two exist on the left side
Remove a fox if there is one on the left side
Remove two foxes if they exist on the left side
Remove both if there is a chicken/fox on the left side

DEPTH 0

Flip the third number
Add a chicken if one exists on the right side
Add two chickens if they exist on the right side
Add a fox if one exists on the right side
Add two foxes if they exist on the right side
Add both if both exist on the right side

DEPTH 1

Flip the third number
Remove a chicken if there is one on the left side
Remove two chickens if two exist on the left side
Remove a fox if there is one on the left side
Remove two foxes if they exist on the left side
Remove both if there is a chicken/fox on the left side

DEPTH 2

Flip the third number
Add a chicken if one exists on the right side
Add two chickens if they exist on the right side
Add a fox if one exists on the right side
Add two foxes if they exist on the right side
Add both if both exist on the right side

DEPTH 3

Flip the third number
Remove a chicken if there is one on the left side
Remove two chickens if two exist on the left side
Remove a fox if there is one on the left side
Remove two foxes if they exist on the left side
Remove both if there is a chicken/fox on the left side

DEPTH 4

Flip the third number
Add a chicken if one exists on the right side
Add two chickens if they exist on the right side
Add a fox if one exists on the right side
Add two foxes if they exist on the right side
Add both if both exist on the right side

DEPTH 5

Flip the third number
Remove a chicken if there is one on the left side
Remove two chickens if two exist on the left side
Remove a fox if there is one on the left side
Remove two foxes if they exist on the left side
Remove both if there is a chicken/fox on the left side

DEPTH 6

