

Day 4 Brain Teasers

Batch I - Vikings

Time Limit: 30 Minutes

June 12, 2019

1 More puzzles!

1. You have 5 jars of pills. One of the jars contains poisonous pills. Each regular pill weighs 10 grams, while the poisonous pill weighs 9 grams. Given a scale, how could you tell which jar had the poisonous pills in just one measurement?

Take out 1 pill from jar 1, 2 pills from jar 2, 3 pills from jar 3, 4 pills from jar 4 and 5 pills from jar 5.

Put all these 15 pills on scale. If none of the pills were poisoned the total weight would be 150 (15×10).

But one of the jars has contaminated pills. So the weight will definitely less than 150. If the weight is 149 then jar 1 has contaminated pills because there is only one contaminated pill. If the weight is 148 then jar 2, if the weight is 147 then jar 3, if the weight is 146 then jar 4, if weight is 145 then jar 5.

2. Tower of Hanoi Problem. Click the [link](#) and follow the instructions on the website. Try and solve it yourself!
If you solve 3 disks, try 4 disks!
3. Three missionaries and three cannibals want to get to the other side of a river. There is a small boat, which can fit only two. To prevent a tragedy, there can never be more cannibals than missionaries together.

1 cannibal and 1 missionary cross and missionary goes back.

2 cannibals cross and 1 cannibal goes back.

2 missionaries cross, 1 missionary and 1 cannibal go back.

2 missionaries cross, 1 cannibal goes back.

This one cannibal takes the remaining cannibals to the other side.