Day 1 Brain Teasers - Week 2

Batch I - Vikings
Time Limit: 30 Minutes

June 17, 2019

1   More puzzles!

1. Ronald and Michelle have two children. The probability that the first child is a girl is 50%. The probability that the second child is a girl is also 50%. Ronald and Michelle tell you that they have a daughter.
   What is the probability that their other child is also a girl?

2. There are five holes arranged in a line. A hermit hides in one of them. Each night, the hermit moves to a different hole, either the neighboring hole on the left or the neighboring hole on the right. Once a day, you get to inspect one hole of your choice. How do you make sure you eventually find the hermit?
   Hint: Divide the holes into odd and even sets.