TEST of your BRAIN, Part V

First Question:

If you have a 7-minute hourglass and an 11-minute hourglass, how can you boil an egg in exactly 15 minutes?

Solution:

Start both hourglasses simultaneously. When the first hourglass runs out fter 7 minutes, turn the 7-minute hourglass over and start again. After 11 minutes when the second has runs out, turn the first hourglass over once more. When the first hourglass runs out again, 15 minutes will have elapsed.

Second Question:

You are walking down a road and come to a fork. One path leads to certain death; the other leads to eternal happiness. You don't know which is which. In the middle of the fork, you come across two brothers who know which is which. One brother always tells the truth and the other always lies.   You can only ask each of them one question. How would you determine which path to take?

Solution:

Ask each of them which path their brother would say is the road to eternal happiness. Each will give the same answer: My brother would say that the left/right path is the correct one. In either case, you would pick the opposite of what they both say because one is telling the truth about it being a lie, and one is lying about it being the truth.

Third Question:

Four people arrive at a river with a narrow bridge that can only hold two people at a time. It's nighttime and they have one torch that has to be used when crossing the bridge. Person A can cross the bridge in 1 minute, Person B in 2 minutes, Person C in 5 minutes, and Person D in 8 minutes. When two people cross the bridge, they must do so at the slower person's pace. Can they all get across the bridge in 15 minutes or less?

Solution:

Yes, they can do so as follows:

1. First, A and B cross the bridge and A comes back with the torch. This takes 3 minutes.
2. Next, C and D cross and B brings the light back. This takes another 10 minutes.
3. Finally, A and B cross again. This takes another 2 minutes.