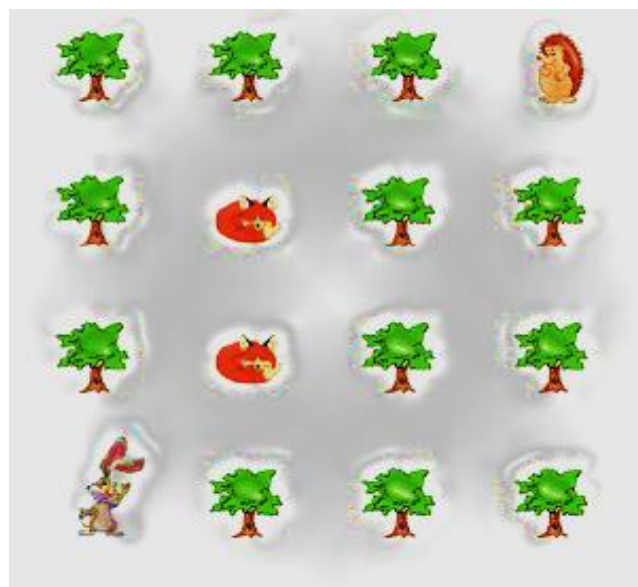


# Welcome Back Puzzles 2018-19

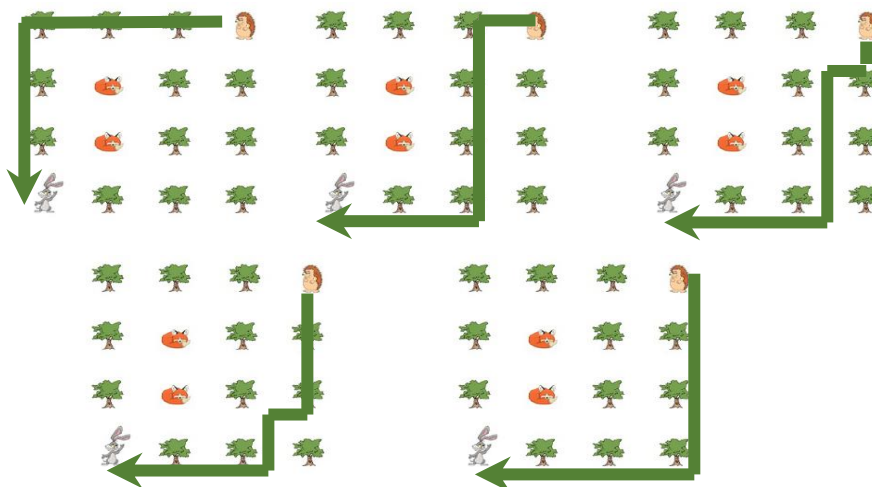
## Puzzle Contest 1 (K-5) Solutions



**1. Hedgehog is going to visit her friend** Rabbit. Hedgehog can go either left or down, but she needs to avoid the foxes hiding in the woods. In how many ways can Hedgehog reach Rabbit? (40 pts.)



Answer: 5 (See below)



**2. This summer at camp five friends compete** in a dart-throwing contest. Each one has two darts to throw at the same circular target, and each individual's score is the sum of the scores in the target regions that are hit. The score for the target regions are the whole numbers from 1 to 10. Each throw hits the target with a different value. The scores are

- Alex – 16 points
- Barry – 4 points
- Carl – 7 points
- David – 11 points
- Eugene – 17 points

Who hits the region worth 6 points? **(60 pts.)**

**Answer: Alex**

**Solution:** Note that Barry must hit 1 and 3. This means Carl must hit 5 and 2, because he scores 7 using two different numbers, neither of which is 1 or 3. Eugene hits 9 and 8--the only other way he could get 17 would be 10 and 7, but that would leave Alex no way to get 16. So Alex must hit 10 and 6, and David hits 7 and 4. Hence Alex hits the 6.