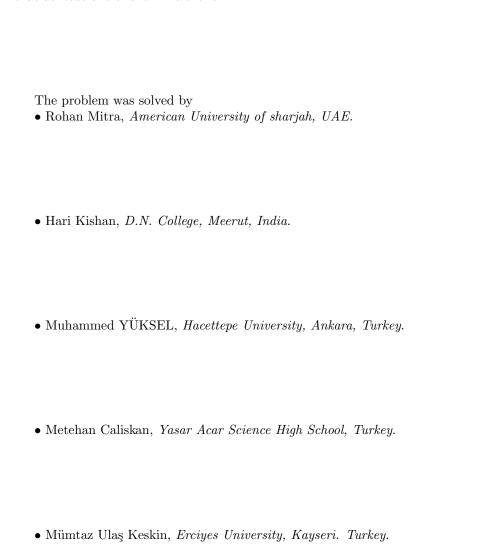
## Hunters

Submission deadline: July  $29^{\mbox{th}}$  2022

There are 2022 hunters in a large field and each hunter averages one hit per 3 shots. All hunters see a fox and shoot at the same time. What is the probability that at least one of them hit the fox?



Discussion.

Note that

Probability of all the shooters missing the fox is  $\left(\frac{2}{3}\right)^{2022}$ . Thus the probability of at least one of them hitting the fox is  $1-\left(\frac{2}{3}\right)^{2022}$ .