

# Yozgi matematika maktabining navbatdagi darsi

2020-yil 18-iyul kuni "O'yinlar nazariyasiga kirish" mavzusida Yozgi matematika maktabining navbatdagi onlayn darsi o'tkazildi. Unda xorijdagi matematik vatandoshlarimizdan biri Malayziyaning Putra universiteti professori G'ofurjon Ibragimov "Differensial o'yinlarga doir dastlabki masalalar" mavzusida talabalar uchun qiziqarli bo'lgan va mazkur nazariyaning paydo bo'lishiga turtki bo'lgan Rufus Isaacs ning "Axilles va toshbaqa" masalasi haqida ma'ruza qildi.

The image shows a video conference with four participants on the left and a whiteboard on the right. The whiteboard contains the following content:

**Axilles va Toshbaqa**

A diagram shows a runner (Axilles) and a turtle (Toshbaqa) on a horizontal line. The runner starts at point A and the turtle starts at point P. The distance between A and P is labeled 'a'. The runner's path is divided into segments  $t_1, t_2, t_3, \dots, t_n$ . The turtle's path is also divided into segments  $t_1, t_2, t_3, \dots, t_n$ . The total time for the runner to reach point B is  $\theta_n = t_1 + t_2 + \dots + t_n \rightarrow \theta$ . The total time for the turtle to reach point B is  $A(\theta_n)T(\theta_n) \rightarrow 0, n \rightarrow \infty$ .

Below the diagram, the following variables are listed:

$$\begin{aligned} A, \rho \\ \tau, \sigma \\ \rho > \sigma \end{aligned}$$