Models of artificial intelligence (AI) developed by Google and Openai were first able to overcome the gold threshold of the International Mathematical Olympiad (IMO), solving five of the six tasks. Until this moment, not a single AI system was able to achieve such a high result at this level of competitions.

Both companies have used universal models of reasoning that process mathematical tasks using a natural language. This distinguishes them from previous approaches based on formal languages and long computing.

For the first time, the organizers of the Olympiad officially collaborated with AI developers. The results of the companies were certified by the IMO jury, and the publication of the results was allowed after the presentation of awards to the participants-people. In total, 630 schoolchildren participated in the 66th International Mathematical Olympiad, held in Australia, and only 11% of them received gold medals.

Openai has achieved success with the help of an experimental model, which allowed AI to “think” longer and use parallel calculations to simultaneously study several logical chains. According to researchers, this required significant resources and turned out to be very costly.

Google also used the universal model Gemini Deep Think, first presented in May. Unlike previous specialized models, this system worked exclusively with the text and met the official time limit – 4.5 hours.