<div align="center">**Egor Bakaev**</div>

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Research publications

E. Bakaev, P. Kozhevnikov, "Linear families of triangles and orthology". arXiv:2312.13893.
In Russian: Matematicheskoe prosvescheniye, vol. 32, 2024.

Educational publications (in Russian)

Publications in Kvant and Kvantik — magazines for schoolstudents and math teachers.

1. with D.Magzhanov, "Closed polygonal chain problem", *Kvant* 5-6 (2024), 25-31.

2. "Transinequality, or How to pour honey into pots", *Kvantik* 1 (2024), 2-6.

3. "Perimeter parity", *Kvantik* 10 (2023), 6-10.

4. "Two bisectors problem", *Kvant* 5 (2023), 43-46.

5. with P. Kozhevnikov, "Rotation and circular interpretations", *Kvant* 2 (2023), 39-45.

6. with P. Kozhevnikov, "Circular arrangements and modular arithmetic", *Kvant* 9 (2022), 38-45.

7. "4 problems about the lunes", *Kvantik* 7 (2022), 16-17.

8. "Hidden symmetry", *Kvant* 6 (2021), 22.

9. "Proizvolov's problem about the sum of absolute values", *Kvant* 1 (2021), 44-49.

10. "Bypassing a polygon", *Kvant* 8 (2020), 27-31.

11. "On sine graph", *Kvant* 4 (2020), 11-15.

12. "Jumping on a regular polygon", *Kvant* 3 (2020), 34-38.

13. "Squares on a grid paper", *Kvantik* 12 (2019), 18-21.

14. with G. Chelnokov, A. Polyanskii, "Discharging method", *Kvant* 12 (2019), 31-33.

15. "Perimeter and area on a grid paper", *Kvant* 12 (2019), 19-22.

16. "Area of a triangle", *Kvantik* 7 (2019), 10-12.

17. "Diagonal of a checkered rectangle", *Kvant* 5 (2019), 35-40.

18. with A.Vesnin, "Ghost chimneys", *Kvant* 10 (2018), 24-25; also *Kvantik* 10 (2018), 16-17.

19. "Combinations of squares", *Kvant* 7 (2018), 22-26; also *Kvantik* 6 (2020), 10-15.

20. "Rotation of a square", *Kvantik* 6 (2017), 6-8.

21. "How to divide a square into two equal parts?", *Kvantik* 5 (2017), 6-7.

22. "Row switchings", *Kvant* 3 (2017), 39-45.

23. "Generalization of Pompeiu's theorem", *Kvant* 1 (2017), 39-42. [Translation to English].

24. with A. Blinkov, "Auxiliary squares", *Kvant* 4 (2016), 25-29.

25. "How to get to school on time", *Kvantik* 3 (2016), 25.

26. with P. Kozhevnikov, I. Yakovlev, "Circles and perpendiculars", *Kvant* 5/6 (2015), 41-46.

27. "Mail carriers", *Kvantik* 4 (2015), 12-13.

28. "Drawing the sum of odd numbers", *Kvantik* 3 (2015), 16-17.

29. "Boys, girls, tables and graphs (Interpretations of countings)", *Kvant* 3 (2015), 37-40.

30. ""Unbearable" furniture", *Kvantik* 5 (2014), 34.

31. "Who is right?", *Kvantik* 6 (2012), 10-11.