Egor Bakaev

Last update: September 9, 2024

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.
- 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.