

Coloring Square Grid, Nesting Rectangles: A Bridge from Mathematical Olympiads to Mathematical Research

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In memory of Paul Erdős on his 110th Birthday

We all know examples when ideas of research mathematics inspire problems for mathematical Olympiads. I will first share with you Merry-Go-Round from Ramsey Theory to a beautiful Olympiad problem “Chess 7 x 7” to Finite Projective Planes. This presentation will then acquaint you with a converse path: from Olympiad problems to research, thus establishing a two-way bridge between Olympiads for young mathematicians and research for all ages.

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