

Title: Geometric Proofs

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Abstract: This Bachelor's thesis treats such proofs of mathematical theorems in which pictures and secondary school geometry play a significant role. Its aim is to promote an unusual approach to theorem proving which enables to literally see the way they function. The proofs described include three categories: figurate numbers, polygons and areas of plane figures with curved boundaries. The thesis can be useful to teachers to liven up their secondary school mathematics lessons or to students of maths-oriented programmes to enrich their knowledge by an unusual approach to theorem proving.

Keywords: proof, geometry, figurate number, polygon, area of plane figure