Proving theorems on regular polygons by elimination — the elementary way

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Abstract. We use elementary geometry and elimination to prove some non-trivial theorems on regular polygons, including regular 5-, 7- and 9-gons. The required knowledge to follow the proofs does not go beyond high school knowledge.

 $\bf Keywords:$ Mathematics education, Pythagorean theorem, Algebraic geometry, Elimination, Rabinowitsch's trick