Geometric solution to the 120 degree problem

By At Right Angles | Nov 15, 2013

In the March 2013 issue of AtRiA, the following result had been stated in the article on 'Harmonic Triples': Let ΔPQR have ∠P = 120°. Let PS be the bisector of ∠QPR, and let PQ = a, PR = b, PS = c; then 1 / a + 1 / b = 1 / c. It had been proved using trigonometry, and the question was asked: Is there a proof using 'pure geometry'? We give just such a proof here...

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