

Rational points in geometric progression on the unit circle

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Abstract. A sequence of rational points on an algebraic planar curve is said to form an r -geometric progression sequence if either the abscissae or the ordinates of these points form a geometric progression sequence with ratio r . In this work, we prove the existence of infinitely many rational numbers r such that for each r there exist infinitely many r -geometric progression sequences on the unit circle $x^2 + y^2 = 1$ of length at least 3.

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