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Self matching in $\lfloor n\alpha \rfloor$,
Fibonacci Quart. **44** (2006), no. 4, 290–296.

Abstract

For an arbitrary real number α with convergents $\frac{p_0}{q_0}, \frac{p_1}{q_1}, \frac{p_2}{q_2}, \dots$, $\lfloor (n + q_i)\alpha \rfloor - \lfloor n\alpha \rfloor$ is equal to p_i , and so is independent of n , except at a small specified number of values of n . For fixed n , this relation holds for all or for all except a finite number of values of i .