On Analogs of Number π in q-Calculus

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Since the number π is introduced like quotient of circle circumference and diameter it occupies attention of whole scientific world. In the last century, q–calculus was made like a complete analogy of standard calculus. In that manner, the corresponding functions and operators (regular and fractional too) were introduced. Recently, the sequences of well-known special numbers (Fibonacci, Stirling) were found. It is interesting that the number e is present from the very beginning, but none mentioned number π. We noticed only two recent trials by R. Dyaz and S. Suslov. In this paper we will suggest a few new possible definitions and discuss their advantages and lacks in order to find the optimal one.

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