

---

## Documents

Mansour, M.<sup>a</sup>, Obaid, M.A.<sup>b</sup>

### Bounds of q-factorial $[n]_q!$

(2011) *Ars Combinatoria*, 102, pp. 313-319.

<sup>a</sup> King Abdul Aziz University, Faculty of Science, Mathematics Department, P. O. Box 80203, Jeddah 21589, Saudi Arabia

<sup>b</sup> Department of Mathematics, Faculty of Science, Mansoura University, Mansoura 35516, Egypt

#### Abstract

In this paper, we get the following upper and lower bounds for q-factorial  $[n]_q!$   $(q; q)_{\infty}^{-n} f_q(n+1)$  and  $[n]_q!(q; q)_{\infty}^{-n} g_q(n+1)$  where  $n \geq 1$ ,  $0 < q < 1$  and the two sequences  $f_q(n)$  and  $g_q(n)$  tends to zero through positive values. Also, we present two examples of the two sequences  $f_q(n)$  and  $g_q(n)$ .

#### Author Keywords

Q-factorial; Q-gamma function; Stirling's formula

**Document Type:** Article

**Source:** Scopus

---

#### About Scopus

[What is Scopus](#)  
[Content coverage](#)  
[What do users think](#)  
[Latest](#)  
[Tutorials](#)

#### Contact and Support

[Contact and support](#)  
[Live Chat](#)

#### About Elsevier

[About Elsevier](#)  
[About SciVerse](#)  
[About SciVal](#)  
[Terms and Conditions](#)  
[Privacy Policy](#)

