Abstract

Some inequalities for the ratios $J_{\nu+1}(x)/J_{\nu}(x)$ and $I_{\nu+1}(x)/I_{\nu}(x)$ of Bessel and modified Bessel functions of the first kind and order $\nu > -1$ are given. The inequalities are found easily from a different definition of the ratios and improve many results obtained recently be several authors.