

$$1.05599 \approx \frac{3^{7/6} \sqrt{\pi \Gamma(10/3)}}{2^{10/3}} \geq \left(\frac{3 \Gamma(x/3 + 7/3)}{2 \Gamma(x/3 + 2)} \right)^{1/2} \frac{\Gamma(x/2 + 1)}{\Gamma(x/2 + 3/2)} \left(\frac{x+1}{3} \right)^{1/3} > 1.$$