



The area inside the boxes is  $\sum_{k=6}^{\infty} \frac{1}{1+k^2}$

The area under the curve is  $\int_5^{\infty} \frac{1}{1+x^2} dx$

$$\therefore \sum_{k=6}^{\infty} \frac{1}{1+k^2} \leq \int_5^{\infty} \frac{1}{1+x^2} dx$$