Problem 1: An Important Limit

Let $\Psi(x) = \displaystyle\int_2^x \frac{dt}{\ln(t)}$. Compute $\displaystyle\lim_{x\to\infty} \frac{\Psi(x)}{\frac{x}{\ln(x)}}$

As always, show your work, fully explain and justify your answer. A solution mainly obtained by computers or calculators will not be accepted.