Question about Calculus (Limit)……!

Q: *Show that*: $\displaystyle\lim_{x\to\pm\infty}\left(1+\frac{1}{x}\right)^{x}=e$

as x approaches infinity while taking

on positive or negative real values.

Note:

Please explain me with step by step.

Please tell me as soon as possible.

Thanks a lot for this.