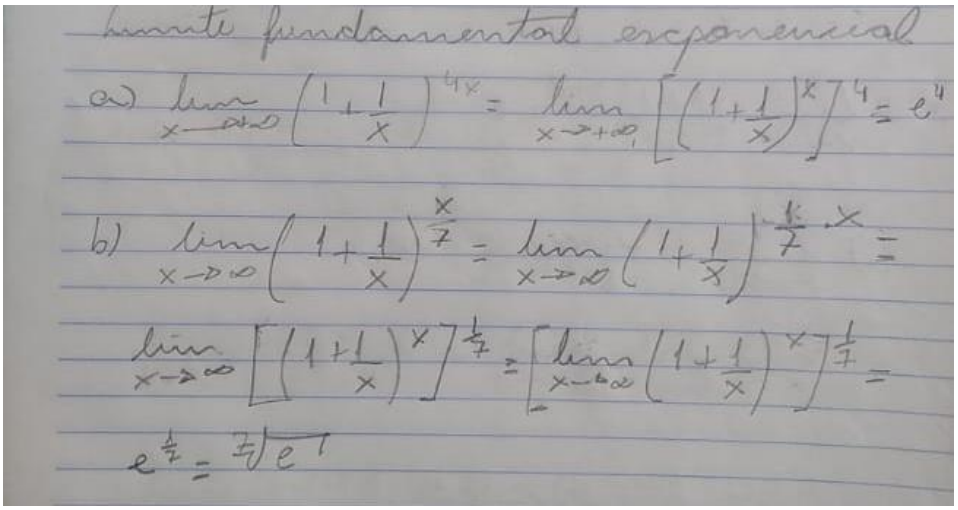
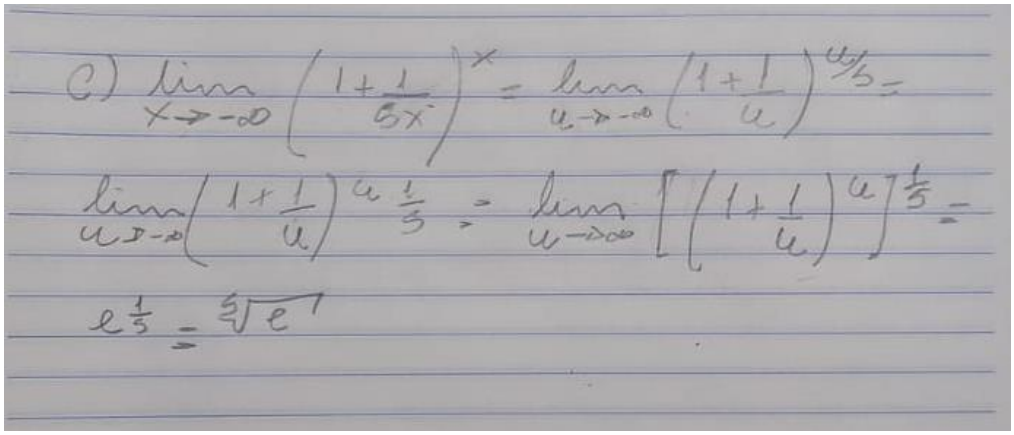
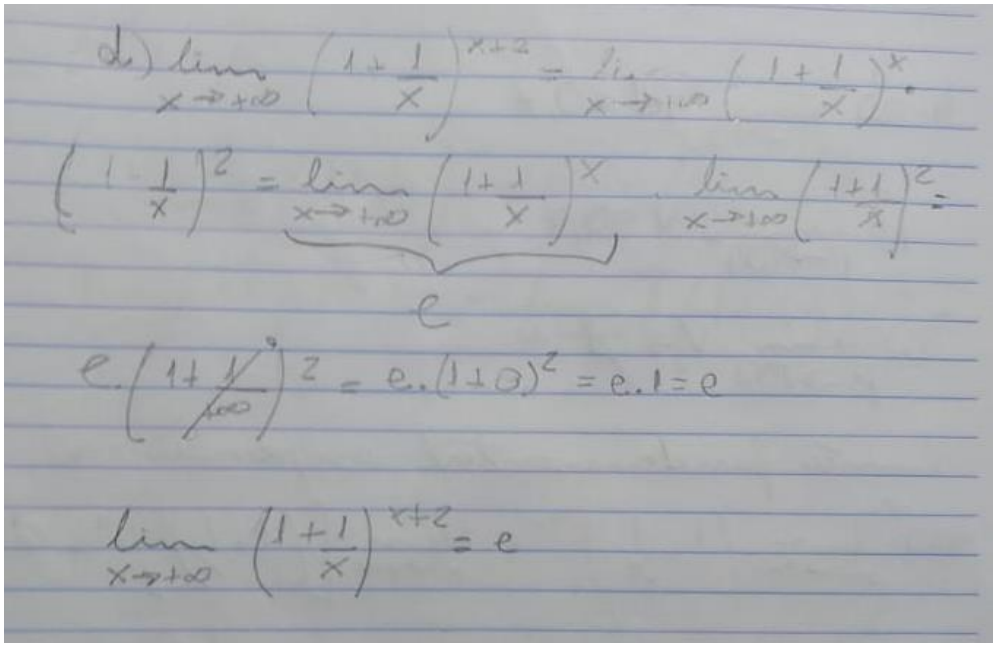
Exercício do Limite – Limite Exponencial







e) $\lim_{x \to +\infty} \left(1 + \frac{1}{x}\right)^{x+2} = \lim_{x \to +\infty} \left(1 + \frac{1}{x}\right)^{x} \cdot$

$\lim_{x \to \infty} \left(1 + \frac{1}{x}\right)^{2} = e \cdot \left(1 + \frac{1}{x}\right)^{2} = e \cdot (1+0)^2 =$

$e \cdot 1 = e$

f) $\lim_{x \to 0} (1+x)^{\frac{1}{x}\cdot 2} = \lim_{u \to \infty} \left(1 + \frac{1}{u}\right)^{2} = e$