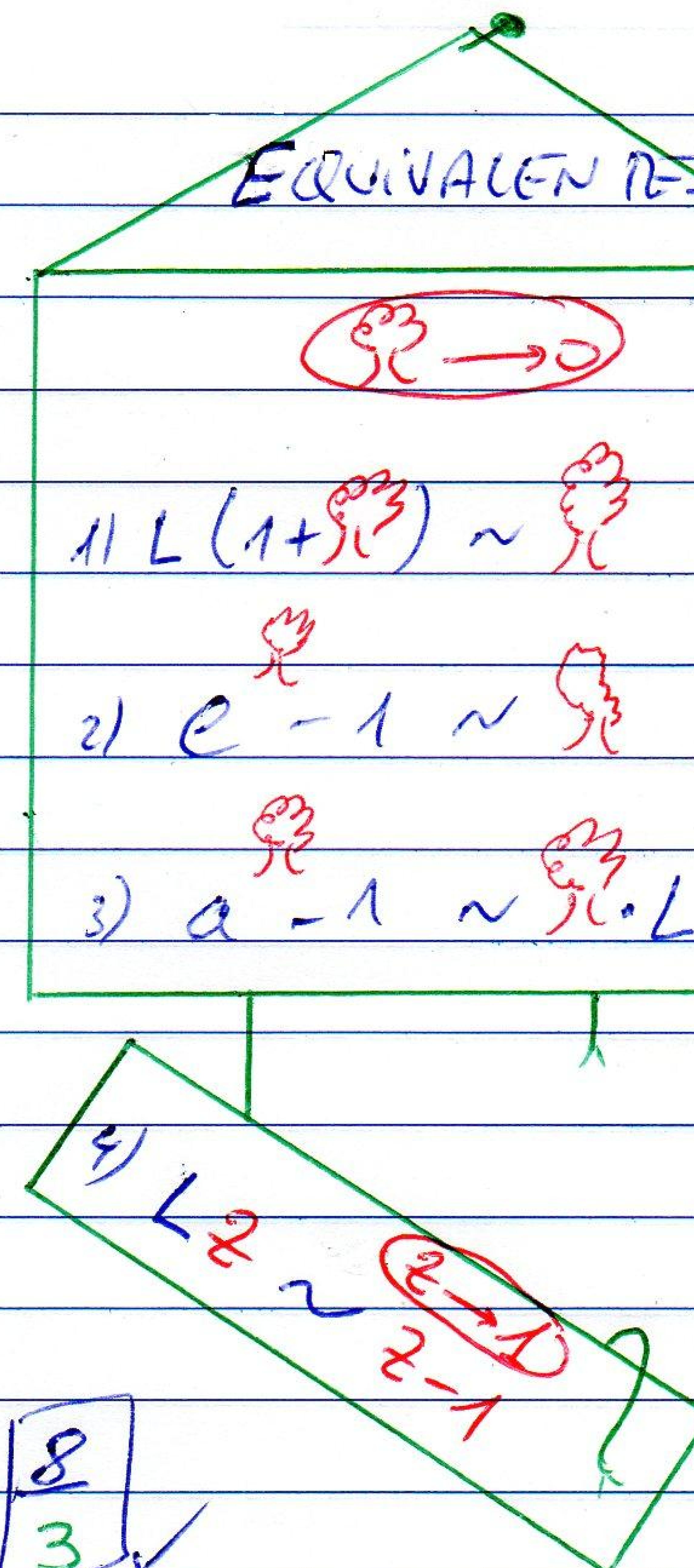
EQUIVALENTES



1) $\lim_{x\to 3} \dfrac{L(1+x^2-3x)}{2x-6} =$

$= \lim_{x\to 3} \dfrac{x^2-3x}{2(x-3)} = \lim_{x\to 3} \dfrac{x(x-3)}{2(x-3)} = \boxed{\dfrac{3}{2}}$ ✓

2) $\lim_{x\to 4} \dfrac{L(x^2-15)}{L(3x-11)} = \lim_{x\to 4} \dfrac{x^2-15-1}{3x-11-1} =$

APLICAMOS 2 VECES, EN EL NUMERADOR Y DENOMINADOR, LA PROPIEDAD (4).

$= \lim_{x\to 4} \dfrac{x^2-16}{3x-12} = \lim_{x\to 4} \dfrac{(x+4)(x-4)}{3(x-4)} = \boxed{\dfrac{8}{3}}$ ✓

3) $\lim_{x\to +\infty} \dfrac{L\left(\frac{x+6}{x-3}\right)}{e^{\frac{1}{x}}-1}$ ($\frac{x+6}{x-3} \to 1$, $\frac{1}{x} \to 0$) $= \lim_{x\to +\infty} \dfrac{\frac{x+6}{x-3}-1}{\frac{1}{x}} = \lim_{x\to +\infty} \dfrac{\frac{x+6-x+3}{x-3}}{\frac{1}{x}} =$

$\lim_{x\to +\infty} \dfrac{9}{x-3}\cdot\dfrac{x}{1} = \lim_{x\to +\infty} \dfrac{9x}{x} = \boxed{9}$

4) $\lim_{x\to 4} \dfrac{5^{x-4}-1}{6^{2x-8}-1} = \lim_{x\to 4} \dfrac{(x-4)\cdot L5}{(2x-8)\cdot L6} = \lim_{x\to 4} \dfrac{(x-4)\cdot L5}{2(x-4)\cdot L6} = \dfrac{L5}{2L6}$