Q5:

mCx

$\log\left(\log\left(\frac{M}{x}\right)-x\right)$

$$0 = x\cdot\frac{T}{M}\cdot\frac{1}{c^2-1} + (M-x)\left(\frac{-T}{M}\right)$$

$$(M-x)\left(\frac{T}{M}\right)\left(\frac{M}{xT}\right) = \frac{1}{c^2-1}$$

$$T\left(1-\frac{x}{M}\right)\left(\frac{M}{Tx}\right) = \frac{1}{c^2-1}$$

$$\frac{M-x}{x} \rightarrow \frac{M}{x} - 1$$

$$\frac{M}{T}\log\left(\frac{M}{M-x}\right)$$

$\lambda = 0 - 5{,}226$

$5{,}526$

$$\frac{M}{M-x} = \left(\frac{M}{x}-1\right)^{-1}+1$$

$$= \frac{x}{M-x} + \frac{M-x}{M-x}$$

$$= \frac{M}{M-x}$$