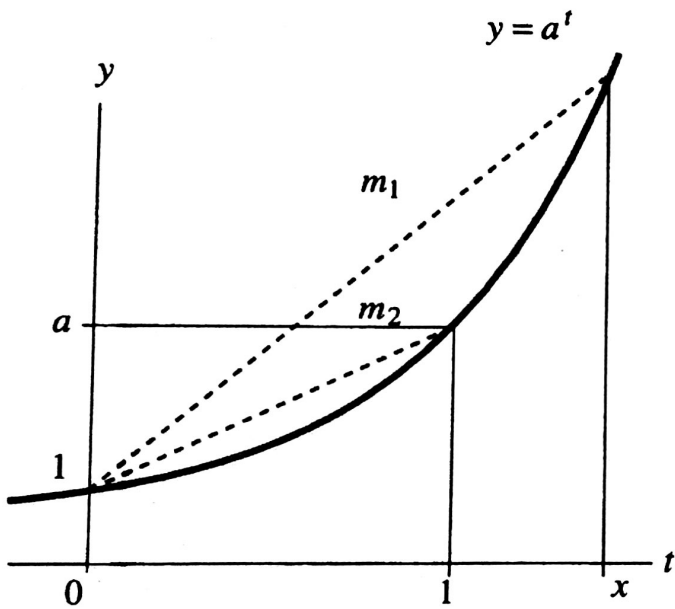


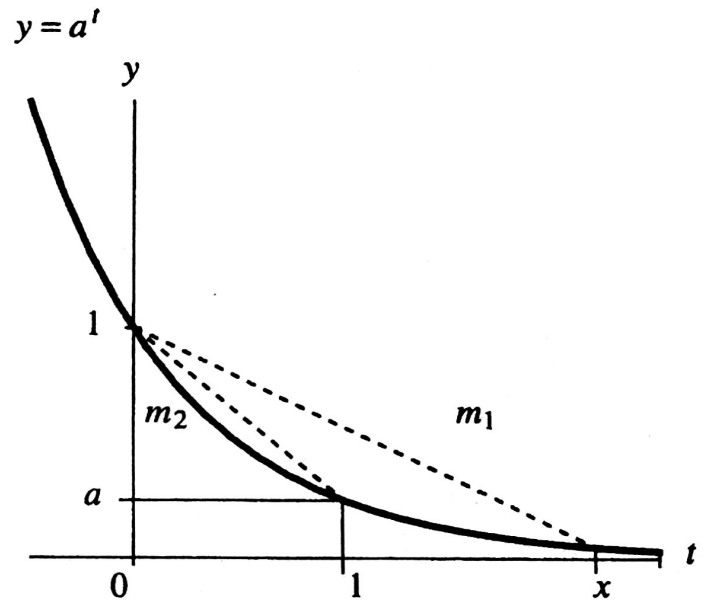
Thm. $a > 0, a \neq 1, x > 1 \Rightarrow a^x - 1 > x(a - 1)$.

Proof.

$a > 1$



$0 < a < 1$



$$m_1 > m_2 \Rightarrow \frac{a^x - 1}{x} > a - 1.$$