quiz 3
math1117-02
u new haven
Fri 13 Sept

name: Solution

1 (10 points). Find the inverse of the function $f(x) = e^{2x+6}$.

- $y = e^{2x+6}$
- $\log(y) = \log\left(e^{2x+6}\right) = (2x+6)\log(e) = 2x+6$
- $x = \dfrac{\log(y)-6}{2}$
- $y = \dfrac{\log(x)-6}{2}$

Therefore $f^{-1}(x) = \dfrac{\log(x)-6}{2}$