Resumo Exponenciais/Logaritimicas

- $f(x) = b^x, (0 < b \neq 1)$
  - $f'(x) = b^x . \ln b$

- $f(x) = e^x$
  - $f'(x) = e^x . \ln e = e^x$

- $f(x) = b^u$
  - $f'(x) = b^u . \ln b . u'$

- $f(x) = e^u$
  - $f'(x) = b^u . \ln e . u' = b^u . u'$

- $f(x) = \log_b x \ (0 < b \neq 1)$
  - $f'(x) = \frac{1}{x . \ln b}$

- $f(x) = \ln x$
  - $f'(x) = \frac{1}{x . \ln e} = \frac{1}{x}$

- $f(x) = \log_b u$
  - $f'(x) = \frac{u'}{u \ln b}$

- $f(x) = \ln u$
  - $f'(x) = \frac{u'}{u \ln e} = \frac{u'}{u}$