

DERIVATA DI  $f(x)^{g(x)}$

$F(x)$

$$y = f(x)^{g(x)}$$

$$y = e$$

$$e^{g(x) \ln f(x)}$$

$$D \left( f(x)^{g(x)} \right) = D \left( e^{g(x) \ln f(x)} \right) = e^{g(x) \ln f(x)} \cdot D \left( g(x) \ln f(x) \right) =$$

$$= e^{g(x) \ln f(x)} \left[ g'(x) \ln f(x) + g(x) \frac{1}{f(x)} f'(x) \right]$$