

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

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

||

### ESEMPIO

$$y = (3x+1)^{\frac{2x-4}{5x}} \Leftrightarrow y = e^{\frac{2x-4}{5x} \ln(3x+1)}$$

$$D_y = \left\{ x \in \mathbb{R} \mid \begin{cases} 3x+1 > 0 \\ 5x \neq 0 \end{cases} \right\} =$$

$$= \left\{ x \in \mathbb{R} \mid \begin{cases} x > -\frac{1}{3} \\ x \neq 0 \end{cases} \right\}$$

$$= \left( -\frac{1}{3}; 0 \right) \cup \left( 0; +\infty \right)$$