

הפונקציה המעריכית

נגזרת הפונקציה המעריכית

$$\left(a^x\right)' = a^x \cdot \ln a$$

$$\left(a^u\right)' = a^u \cdot u' \cdot \ln a$$

$$\left(e^x\right)' = e^x$$

$$\left(e^u\right)' = e^u \cdot u'$$

$$y = e^{\sqrt{x}} \quad .23$$

$$y = \frac{e^x}{x} \quad .24$$

$$y = \frac{e^{x^2}}{x-2} \quad .25$$

$$y = \frac{e^{2x}}{x^2-1} \quad .26$$

$$y = \frac{e^x - e^{-x}}{e^x + e^{-x}} \quad .27$$

$$y = e^{\sin x} \quad .28$$

$$y = e^{\cos 2x} \quad .29$$

$$y = e^x \cdot \sin x \quad .30$$

$$y = 2^x \quad .1$$

$$y = 3^x \quad .2$$

$$y = 7 \cdot 5^x \quad .3$$

$$y = 10^{3x} \quad .4$$

$$y = 6 \cdot 2^{4x} \quad .5$$

$$y = \frac{3^{6x}}{6} \quad .6$$

$$y = 3 \cdot e^x \quad .7$$

$$y = x^3 - e^x \quad .8$$

$$y = e^{4x} \quad .9$$

$$y = e^{2x} - e^{-x} \quad .10$$

$$y = 3e^{2x} + 4e^{-5x} \quad .11$$

$$y = e^{x^2} \quad .12$$

$$y = e^{x^2-5x} \quad .13$$

$$y = 2e^{x^3-1} \quad .14$$

$$y = \frac{e^{x^2-6x}}{2} \quad .15$$

$$y = x \cdot e^x \quad .16$$

$$y = x^2 \cdot e^x \quad .17$$

$$y = x \cdot e^{-x} \quad .18$$

$$y = x^3 \cdot e^{-x} \quad .19$$

$$y = (x^2 + 2x) \cdot e^{-x} \quad .20$$

$$y = x \cdot e^{-x^2} \quad .21$$

$$y = e^{\frac{1}{x}} \quad .22$$