

# הפונקציה המעריכית

## נגזרת הפונקציה המעריכית – פתרונות

$$y' = -\frac{1}{x^2} \cdot e^x \quad .22$$

$$y' = \frac{e^{\sqrt{x}}}{2\sqrt{x}} \quad .23$$

$$y' = \frac{e^x(x-1)}{x^2} \quad .24$$

$$y' = \frac{(2x^2 - 4x - 1)}{(x-2)^2} \cdot e^{x^2} \quad .25$$

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

$$y' = \frac{4}{(e^x + e^{-x})^2} \quad .27$$

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

$$y' = -2 \cdot \sin 2x \cdot e^{\cos 2x} \quad .29$$

$$y' = e^x (\cos x + \sin x) \quad .30$$

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

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

$$y' = 7 \cdot 5^x \cdot \ln(5) \quad .3$$

$$y' = 3 \cdot \ln(10) \cdot 10^{3x} \quad .4$$

$$y' = 24 \cdot \ln(2) \cdot 2^{4x} \quad .5$$

$$y' = 3^{6x} \cdot \ln(3) \quad .6$$

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

$$y' = 3x^2 - e^x \quad .8$$

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

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

$$y' = 6e^{2x} - 20e^{-5x} \quad .11$$

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

$$y' = (2x - 5) \cdot e^{x^2 - 5x} \quad .13$$

$$y' = 6x^2 \cdot e^{x^3 - 1} \quad .14$$

$$y' = (x - 3) \cdot e^{x^2 - 6x} \quad .15$$

$$y' = (1 + x) \cdot e^x \quad .16$$

$$y' = (2 + x) \cdot xe^x \quad .17$$

$$y' = (1 - x) \cdot e^{-x} \quad .18$$

$$y' = (3x^2 - x^3) \cdot e^{-x} \quad .19$$

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

$$y' = (1 - 2x^2) \cdot e^{-x^2} \quad .21$$