



مدونة المناهج السعودية

<https://eduschool40.blog>

الموقع التعليمي لجميع المراحل الدراسية

في المملكة العربية السعودية

①

تأريخ تفاضل الدوال الألي

$$y = 2^{3x-2}$$

$$\frac{dy}{dx} = 2^{3x-2} (3) = 3 \cdot 2^{3x-2} \ln 2$$

$$y = 4^{3x-2} \Rightarrow y' = 3 \cdot 4^{3x-2} \ln 4$$

$$y = 2^{2-3x} = -3 \cdot 2^{2-3x} \ln 2$$

$$y = 4^{2-3x} = -3 \cdot 4^{2-3x} \ln 4$$

$$y = 2^{4x-2} = 4 \cdot 2^{4x-2} \ln 2$$

$$y = 4^{4x-2} = 4 \cdot 4^{4x-2} \ln 4$$

$$y = 4^{2-4x} = -4 \cdot 4^{2-4x} \ln 4$$

$$y = 2^{2-4x} \Rightarrow -4 \cdot 2^{2-4x} \ln 2$$

(2)

$$y = 2^{3-5x} \implies -5 \cdot 2^{3-5x} \cdot \ln 2$$

$$y = 4^{3-5x} = -5 \cdot 4^{3-5x} \ln 4$$

$$y = 2^{5x+3} = 5 \cdot 2^{5x+3} \ln 2$$

$$y = 4^{5x+3} = 5 \cdot 4^{5x+3} \ln 4$$

$$y = 3^{x^2-2x} = (2x-2) 3^{x^2-2x} \ln 3$$

$$y = 3^{-x^2+2x} = (-2x+2) 3^{-x^2+2x} \ln 3$$

$$y = 3^{x^2+2x} = (2x+2) 3^{x^2+2x} \ln 3$$

$$y = 3^{2x^2+2x} = (4x+2) 3^{2x^2+2x} \ln 3$$

$$y = 3^{2x^2-2x} = (4x-2) 3^{2x^2-2x} \ln 3$$

$$y = 2^{x^2-2x} = (2x-2) 2^{x^2-2x} \ln 2$$

$$y = 2^{x^2+2x} = (2x+2) 2^{x^2+2x} \ln 2$$

$$y = 4^{x^2+2x} = (2x+2) 4^{x^2+2x} \ln 4$$

(3)

$$y = 3^{x^2-x} = (2x-1) 3^{x^2-x} \ln 3$$

$$y = 4^{x^2-x} = (2x-1) 4^{x^2-x} \ln 4$$

$$y = 4^{x^2-x} = (2x-1) 4^{x^2-x} \ln 4$$

$$y = 3^{2x+2} = 2 \cdot 3^{2x+2} \ln 3$$

$$y = 3^{4x+2} = 4 \cdot 3^{4x+2} \ln 3$$
