

2010 2010 6 2010 17 92 20 1431

(11) $\frac{1}{x^2} = x^{-2}$ $\frac{d}{dx} x^{-2} = -2x^{-3} = -\frac{2}{x^3}$ $\frac{d}{dx} \frac{1}{x^2} = -\frac{2}{x^3}$

(12) $\frac{d}{dx} x^n = nx^{n-1}$ $\frac{d}{dx} x^3 = 3x^2$ $\frac{d}{dx} x^2 = 2x$ $\frac{d}{dx} x = 1$ $\frac{d}{dx} x^0 = 0$

(13) $\frac{d}{dx} x^n = nx^{n-1}$ $\frac{d}{dx} x^{-1} = -x^{-2} = -\frac{1}{x^2}$ $\frac{d}{dx} \frac{1}{x} = -\frac{1}{x^2}$

(14) $\frac{d}{dx} x^n = nx^{n-1}$ $\frac{d}{dx} x^2 = 2x$ $\frac{d}{dx} x^3 = 3x^2$ $\frac{d}{dx} x^4 = 4x^3$ $\frac{d}{dx} x^5 = 5x^4$

مَسْئَلَتِ ۱۱

۱۱. ۱

(1) $\frac{d}{dx} x^n = nx^{n-1}$ $\frac{d}{dx} x^2 = 2x$ $\frac{d}{dx} x^3 = 3x^2$ $\frac{d}{dx} x^4 = 4x^3$ $\frac{d}{dx} x^5 = 5x^4$

(2) $\frac{d}{dx} x^n = nx^{n-1}$ $\frac{d}{dx} x^2 = 2x$ $\frac{d}{dx} x^3 = 3x^2$ $\frac{d}{dx} x^4 = 4x^3$ $\frac{d}{dx} x^5 = 5x^4$

(3) $\frac{d}{dx} x^n = nx^{n-1}$ $\frac{d}{dx} x^2 = 2x$ $\frac{d}{dx} x^3 = 3x^2$ $\frac{d}{dx} x^4 = 4x^3$ $\frac{d}{dx} x^5 = 5x^4$

(4) $\frac{d}{dx} x^n = nx^{n-1}$ $\frac{d}{dx} x^2 = 2x$ $\frac{d}{dx} x^3 = 3x^2$ $\frac{d}{dx} x^4 = 4x^3$ $\frac{d}{dx} x^5 = 5x^4$

(1) $\frac{d}{dx} x^n = nx^{n-1}$ $\frac{d}{dx} x^2 = 2x$ $\frac{d}{dx} x^3 = 3x^2$ $\frac{d}{dx} x^4 = 4x^3$ $\frac{d}{dx} x^5 = 5x^4$

(2) $\frac{d}{dx} x^n = nx^{n-1}$ $\frac{d}{dx} x^2 = 2x$ $\frac{d}{dx} x^3 = 3x^2$ $\frac{d}{dx} x^4 = 4x^3$ $\frac{d}{dx} x^5 = 5x^4$

(3) $\frac{d}{dx} x^n = nx^{n-1}$ $\frac{d}{dx} x^2 = 2x$ $\frac{d}{dx} x^3 = 3x^2$ $\frac{d}{dx} x^4 = 4x^3$ $\frac{d}{dx} x^5 = 5x^4$

