



167	167	Asha
11/13	30.1.17	30.1.17
		Δ
Handwritten signature		Handwritten signature

Handwritten text in Arabic script

Handwritten note: 20/10/2017

Handwritten text in Arabic script, likely a title or header for the certificate.

Main body of handwritten text in Arabic script, containing the primary content of the certificate.

Second paragraph of handwritten text in Arabic script.

Handwritten text in Arabic script, possibly a date or reference.

1 1438

29 2017

Handwritten text in Arabic script

Handwritten signature in Arabic script

Handwritten text in Arabic script

Handwritten text in Arabic script

Handwritten text in Arabic script

Handwritten text in Arabic script

26. $\frac{1}{x^2} = x^{-2}$ $\frac{d}{dx} x^{-2} = -2x^{-3} = -\frac{2}{x^3}$ $\frac{d}{dx} \frac{1}{x^2} = -\frac{2}{x^3}$

27. $\frac{1}{x^3} = x^{-3}$ $\frac{d}{dx} x^{-3} = -3x^{-4} = -\frac{3}{x^4}$ $\frac{d}{dx} \frac{1}{x^3} = -\frac{3}{x^4}$

28. $\frac{1}{x^4} = x^{-4}$ $\frac{d}{dx} x^{-4} = -4x^{-5} = -\frac{4}{x^5}$ $\frac{d}{dx} \frac{1}{x^4} = -\frac{4}{x^5}$

29. $\frac{1}{x^5} = x^{-5}$ $\frac{d}{dx} x^{-5} = -5x^{-6} = -\frac{5}{x^6}$ $\frac{d}{dx} \frac{1}{x^5} = -\frac{5}{x^6}$

30. $\frac{1}{x^6} = x^{-6}$ $\frac{d}{dx} x^{-6} = -6x^{-7} = -\frac{6}{x^7}$ $\frac{d}{dx} \frac{1}{x^6} = -\frac{6}{x^7}$

31. $\frac{1}{x^7} = x^{-7}$ $\frac{d}{dx} x^{-7} = -7x^{-8} = -\frac{7}{x^8}$ $\frac{d}{dx} \frac{1}{x^7} = -\frac{7}{x^8}$

تمرینات

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. $\frac{d}{dx} x^{-1} = -x^{-2} = -\frac{1}{x^2}$ $\frac{d}{dx} x^{-2} = -2x^{-3} = -\frac{2}{x^3}$ $\frac{d}{dx} x^{-3} = -3x^{-4} = -\frac{3}{x^4}$

3. $\frac{d}{dx} x^{\frac{1}{2}} = \frac{1}{2}x^{-\frac{1}{2}} = \frac{1}{2\sqrt{x}}$ $\frac{d}{dx} x^{\frac{3}{4}} = \frac{3}{4}x^{-\frac{1}{4}} = \frac{3}{4\sqrt[4]{x}}$

4. $\frac{d}{dx} x^{\frac{1}{3}} = \frac{1}{3}x^{-\frac{2}{3}} = \frac{1}{3\sqrt[3]{x^2}}$ $\frac{d}{dx} x^{\frac{2}{3}} = \frac{2}{3}x^{-\frac{1}{3}} = \frac{2}{3\sqrt[3]{x}}$

