

3. $\frac{1}{x^2} = x^{-2}$ $\frac{d}{dx} x^{-2} = -2x^{-3} = -\frac{2}{x^3}$
4. $\frac{1}{x^3} = x^{-3}$ $\frac{d}{dx} x^{-3} = -3x^{-4} = -\frac{3}{x^4}$
5. $\frac{1}{x^4} = x^{-4}$ $\frac{d}{dx} x^{-4} = -4x^{-5} = -\frac{4}{x^5}$
6. $\frac{1}{x^5} = x^{-5}$ $\frac{d}{dx} x^{-5} = -5x^{-6} = -\frac{5}{x^6}$
7. $\frac{1}{x^6} = x^{-6}$ $\frac{d}{dx} x^{-6} = -6x^{-7} = -\frac{6}{x^7}$
8. $\frac{1}{x^7} = x^{-7}$ $\frac{d}{dx} x^{-7} = -7x^{-8} = -\frac{7}{x^8}$
9. $\frac{1}{x^8} = x^{-8}$ $\frac{d}{dx} x^{-8} = -8x^{-9} = -\frac{8}{x^9}$

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

7. $\frac{d}{dx} x^{-n} = -n x^{-n-1}$ $\frac{d}{dx} x^{-8} = -8 x^{-9} = -\frac{8}{x^9}$

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

- $\frac{d}{dx} x^{-1} = -1 x^{-2} = -\frac{1}{x^2}$
- $\frac{d}{dx} x^{-2} = -2 x^{-3} = -\frac{2}{x^3}$
- $\frac{d}{dx} x^{-3} = -3 x^{-4} = -\frac{3}{x^4}$
- $\frac{d}{dx} x^{-4} = -4 x^{-5} = -\frac{4}{x^5}$
- $\frac{d}{dx} x^{-5} = -5 x^{-6} = -\frac{5}{x^6}$
- $\frac{d}{dx} x^{-6} = -6 x^{-7} = -\frac{6}{x^7}$
- $\frac{d}{dx} x^{-7} = -7 x^{-8} = -\frac{7}{x^8}$
- $\frac{d}{dx} x^{-8} = -8 x^{-9} = -\frac{8}{x^9}$

