

Power Rule

1. Find the derivative of $f(x) = 2x^3 - 4x^2 + 10x - 3$.

2. If $f(x) = 12x^4 - 5x^2$, find $f'(-1)$.

3. Find the normal line to $y = -5x^2 + 3x$ at $x = 3$.

4. Find:

a. $\frac{d}{dx}(2x^{\sqrt{3}})$

b. $\frac{d}{dx}(5x^{2\pi} + \frac{1}{2}x^{4e})$