

$$f(x) = 4x - 3$$

$$f(x) = \sqrt{2}$$

$$f(x) = -x$$

$$f(x) = 5x^8 - 3x^3 + 2x^2$$

$$f(x) = \frac{3}{4}x^8 - \frac{1}{3}x^3 + \frac{5}{4}x^2 + \frac{5}{2}$$

$$f(x) = (5x^2 + 1)^2$$

$$f(x) = \frac{1}{2}(x^{10} + 4x^3)$$

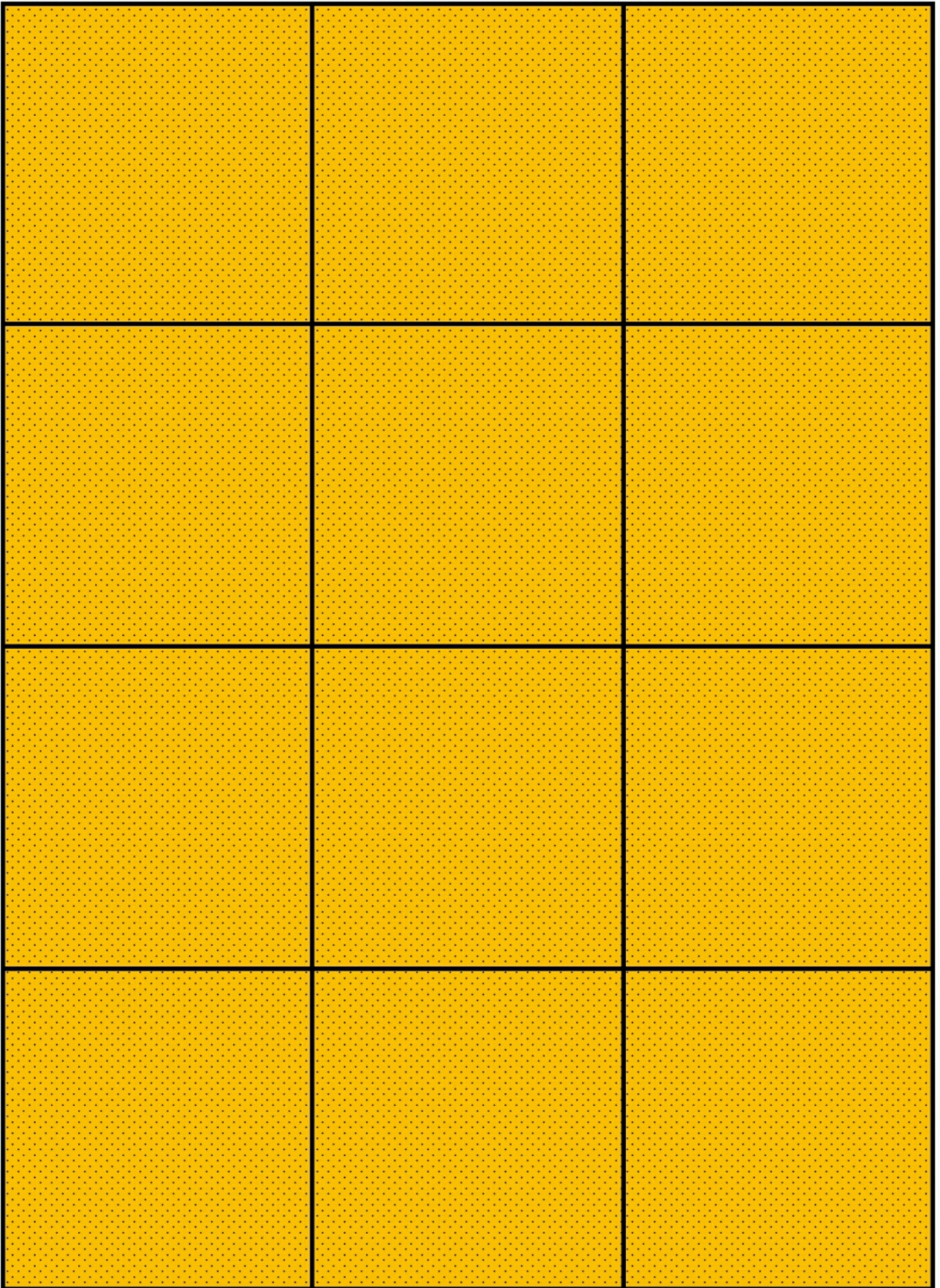
$$f(x) = (x^8 - 1)(4x^2 - 1)$$

$$f(x) = \sqrt[3]{x^2}$$

$$f(x) = \frac{1}{x^3}$$

$$f(x) = \frac{x^3}{x+1}$$

$$f(x) = (x^2 + 1)^{51}$$



$$f(x) = \frac{(5x - 3)^3}{(1 - 2x)^2}$$

$$f(x) = \frac{x^4}{2} - \frac{7}{3}x^3 - x^2 + 1$$

$$f(x) = (3x^2 - 1)^{10}$$

$$f(x) = \cos(2x)$$

$$f(x) = \cos^2(x) + \sin^2(x)$$

$$f(x) = 2 - \tan(x) + x$$

$$f'(x) = 4$$

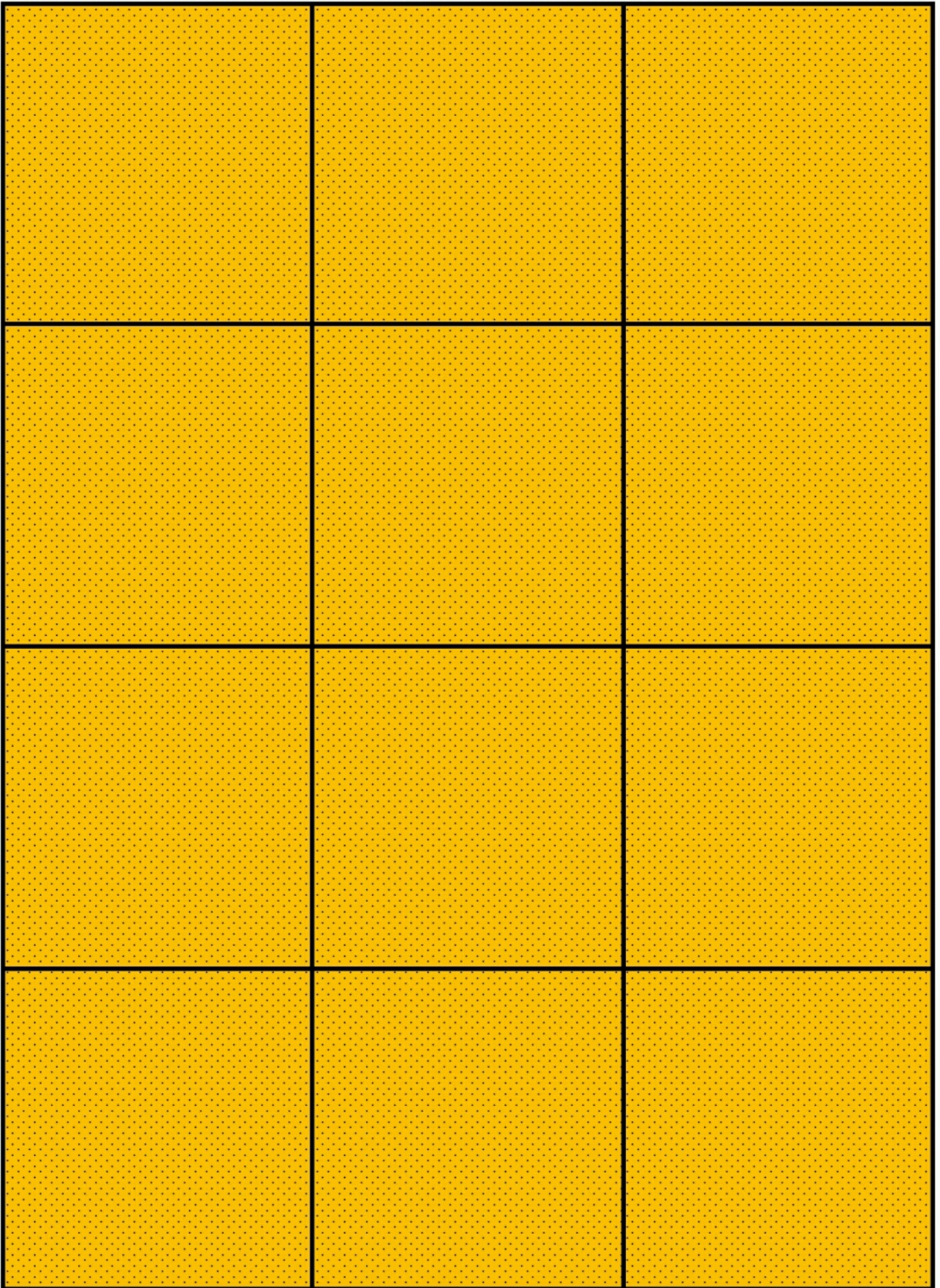
$$f'(x) = 0$$

$$f'(x) = -1$$

$$f^1(x) = 40x^7 - 9x^2 + 4x$$

$$f'(x) = 6x^7 - x^2 + \frac{5}{2}x$$

$$f'(x) = 20x(5x^2 + 1)$$



$$f'(x) = 5x^9 + 6x^2$$

$$f'(x) = 8x(5x^8 - x^6 - 1)$$

$$f'(x) = \frac{2}{3 \cdot \sqrt[3]{x}}$$

$$f'(x) = -\frac{3}{x^4}$$

$$f'(x) = \frac{x^2(2x + 3)}{(x + 1)^2}$$

$$f'(x) = 102x(x^2 + 1)^{50}$$

$$f'(x) = \frac{(5x - 3)^2(-10x + 3)}{(1 - 2x)^3}$$

$$f'(x) = 2x^3 - 7x^2 - 2x$$

$$f'(x) = 60x(3x^2 - 1)^9$$

$$f'(x) = -2 \sin(2x)$$

$$f'(x) = 0$$

$$\begin{aligned} f'(x) &= \frac{2}{\cos^2(x)} + 1 \\ &= 2 \tan^2(x) + 3 \end{aligned}$$

