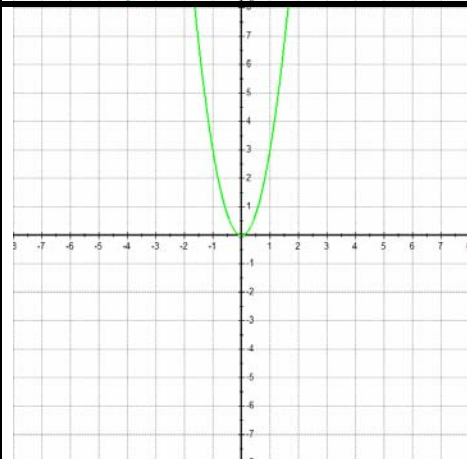
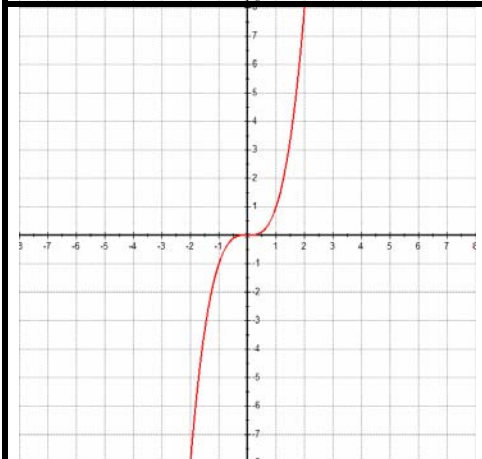


Finde zu den  
**roten Funktionen**  
 die **grünen Ableitungen!**

$$f(x) = x^2$$

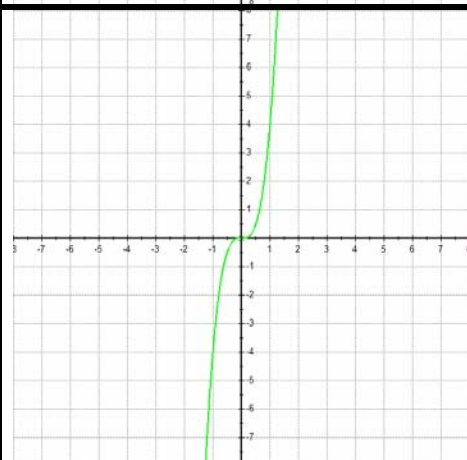
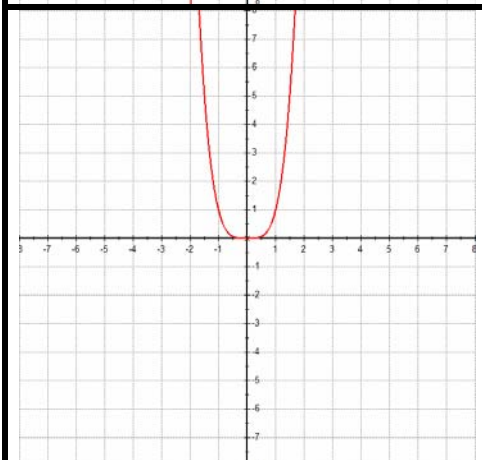
$$f'(x) = 2x$$

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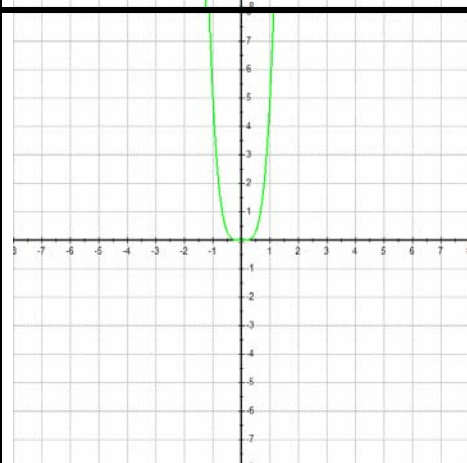
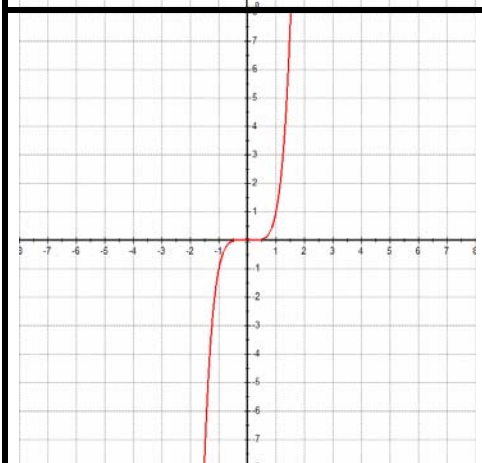
$$f(x) = x^3$$

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



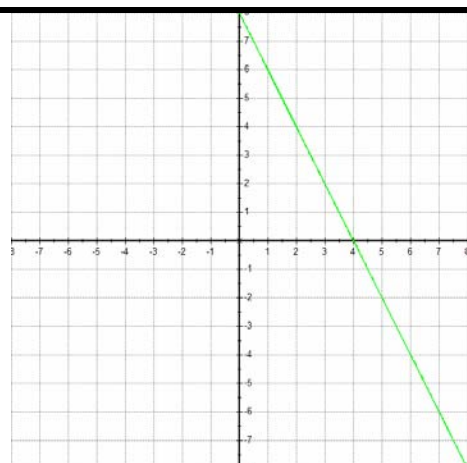
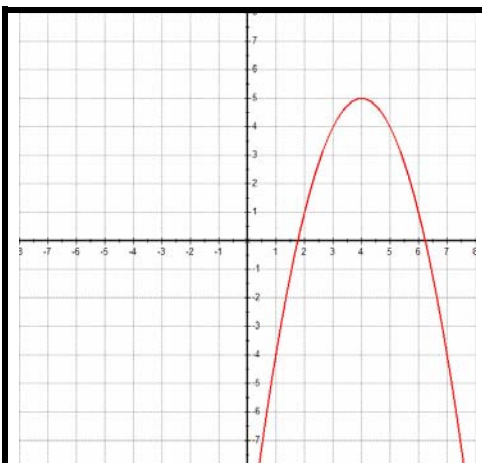
$$f(x) = x^4$$

$$f'(x) = 4x^3$$



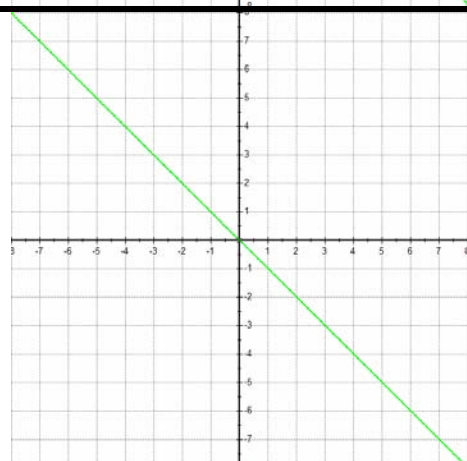
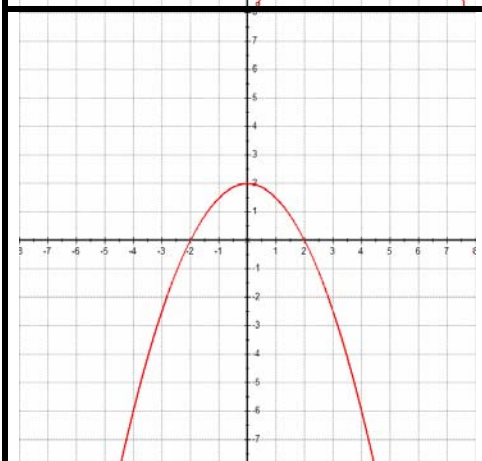
$$f(x) = x^5$$

$$f'(x) = 5x^4$$



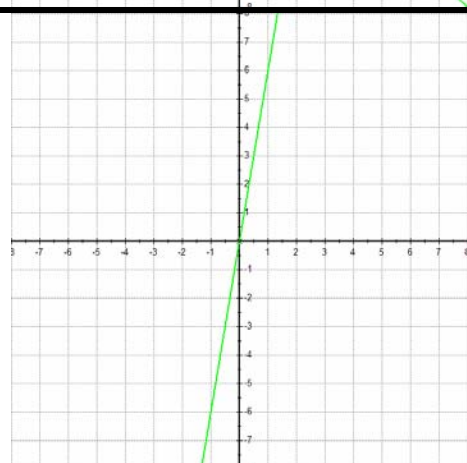
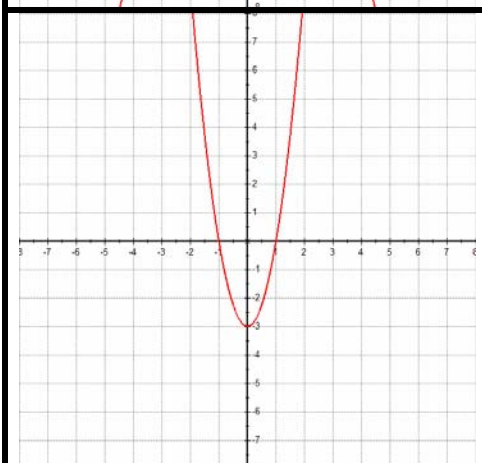
$$f(x) = -(x - 4)^2 + 5$$

$$f'(x) = -2x + 8$$



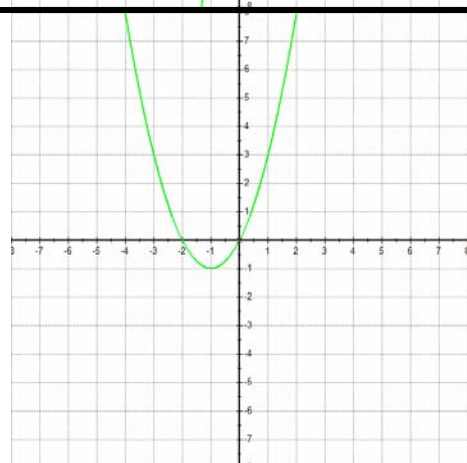
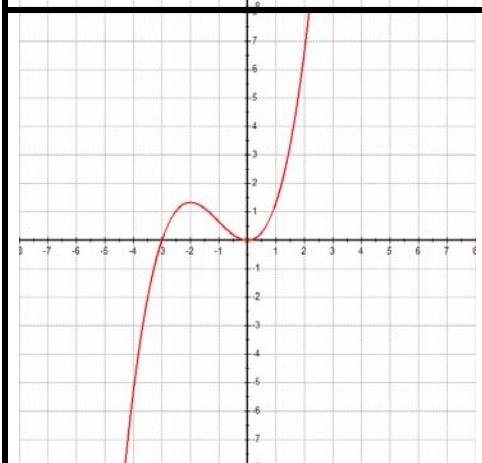
$$f(x) = -\frac{1}{2}x^2 + 2$$

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



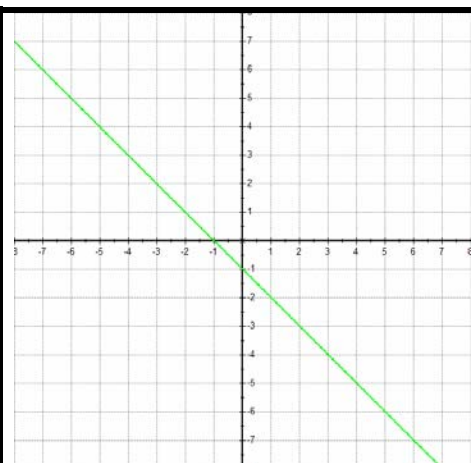
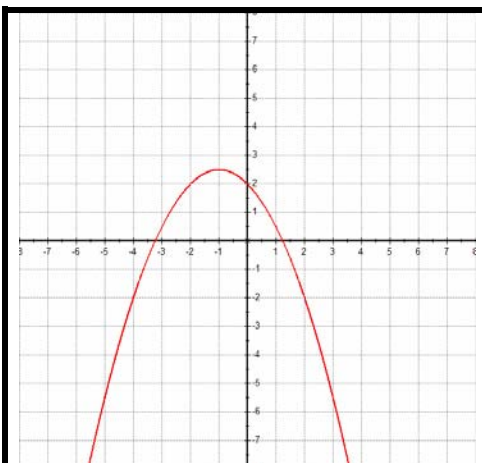
$$f(x) = 3x^2 - 3$$

$$f'(x) = 6x$$



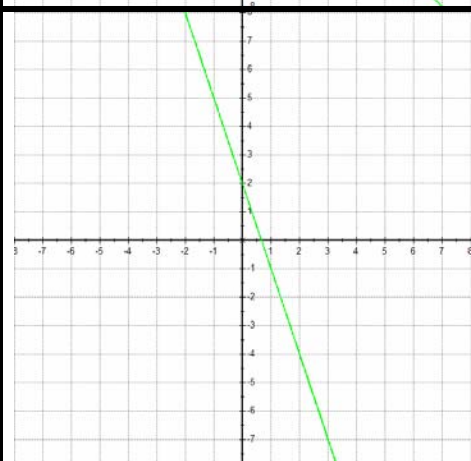
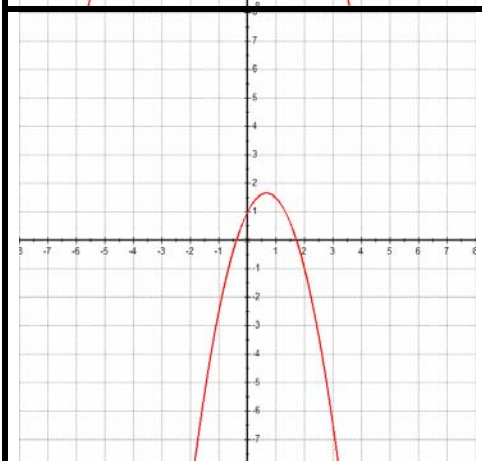
$$f(x) = \frac{1}{3}x^3 + x^2$$

$$f'(x) = x^2 + 2x$$



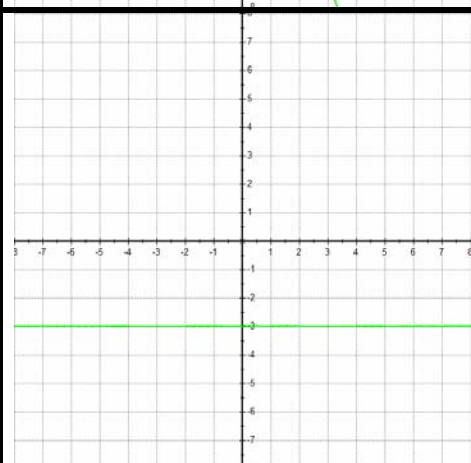
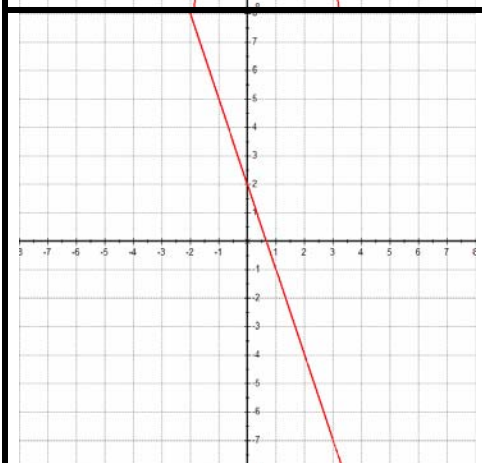
$$f(x) = -\frac{1}{2}x^2 - x + 2$$

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



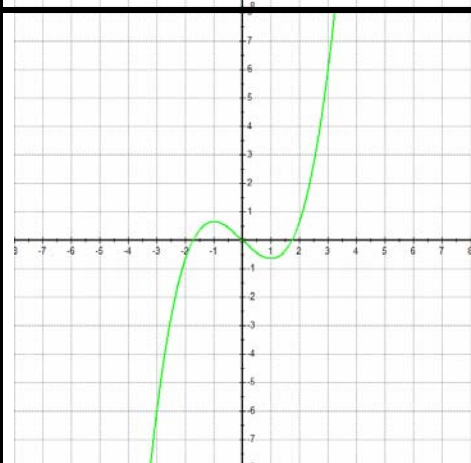
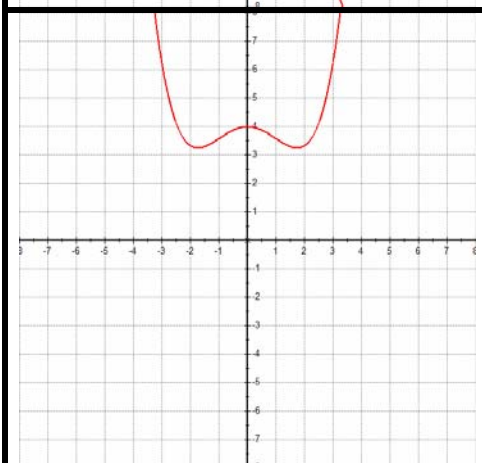
$$f(x) = -\frac{3}{2}x^2 + 2x + 1$$

$$f'(x) = -3x + 2$$



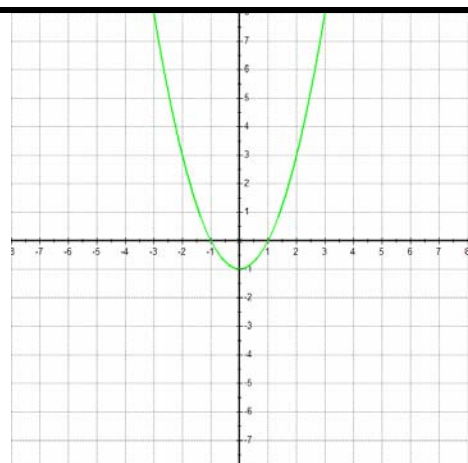
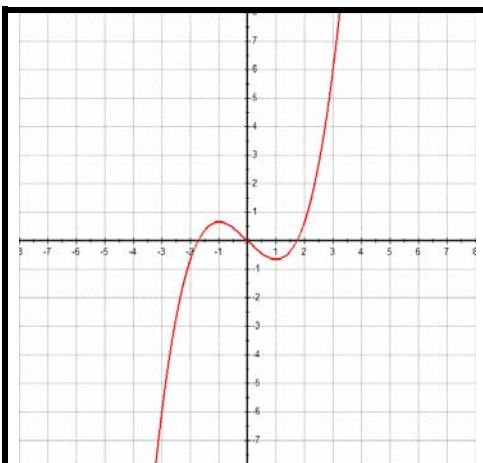
$$f(x) = -3x + 2$$

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



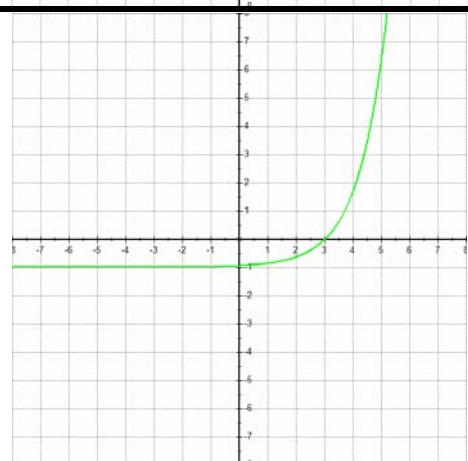
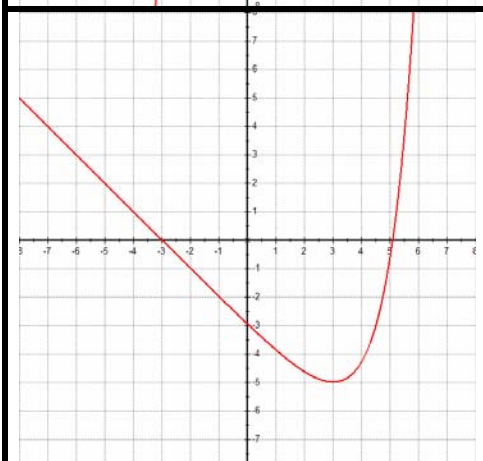
$$f(x) = \frac{1}{12}x^4 - \frac{1}{2}x^2 + 4$$

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



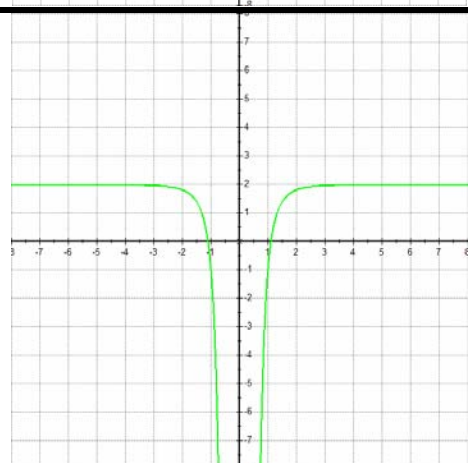
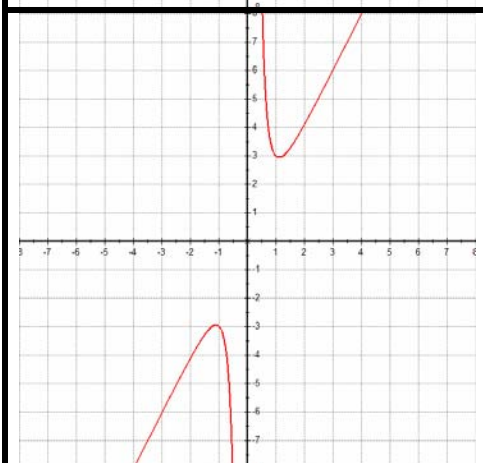
$$f(x) = \frac{1}{3}x^3 - x$$

$$f'(x) = x^2 - 1$$



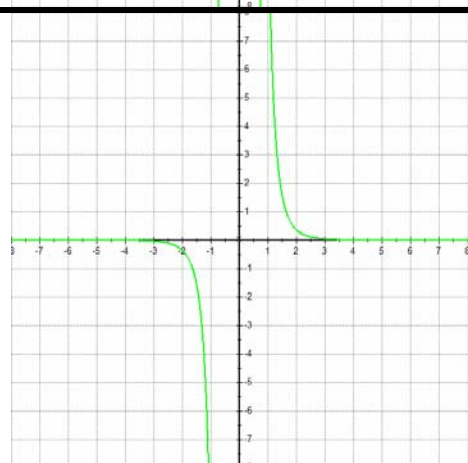
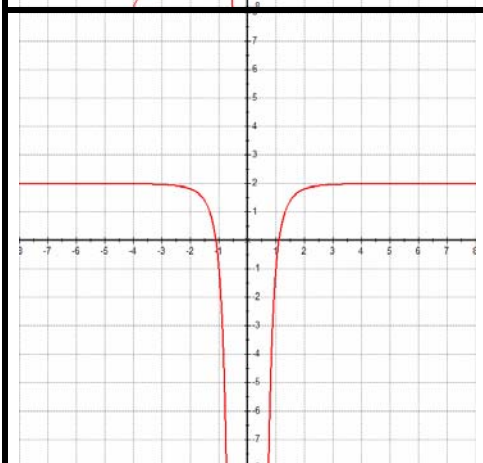
$$f(x) = e^{x-3} - x - 3$$

$$f'(x) = e^{x-3} - 1$$



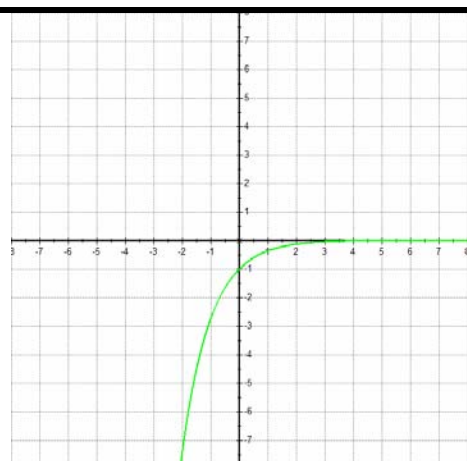
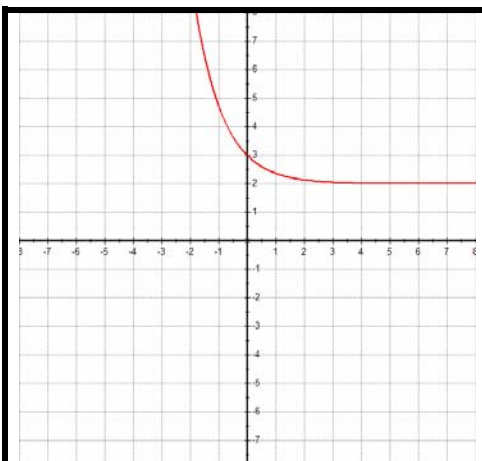
$$f(x) = \frac{1}{x^3} + 2x$$

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



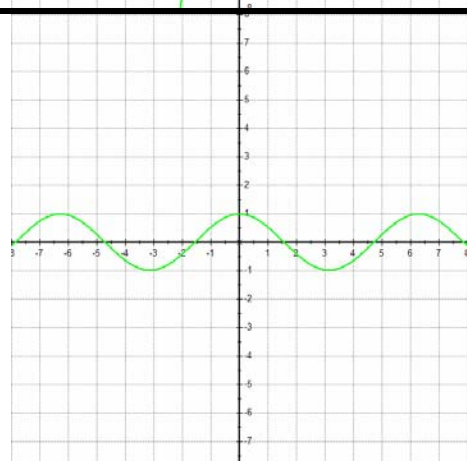
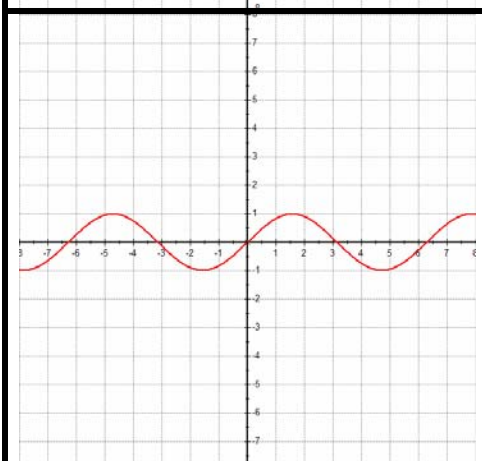
$$f(x) = -\frac{3}{x^2} + 2$$

$$f'(x) = \frac{6}{x}$$



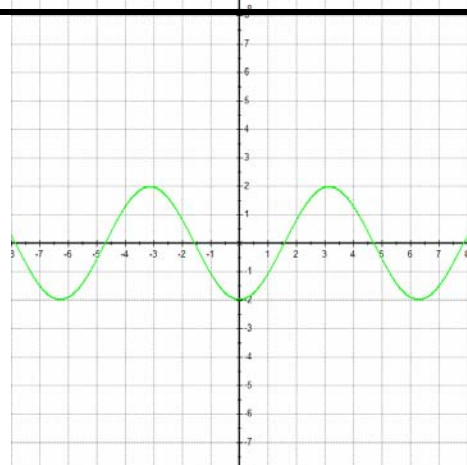
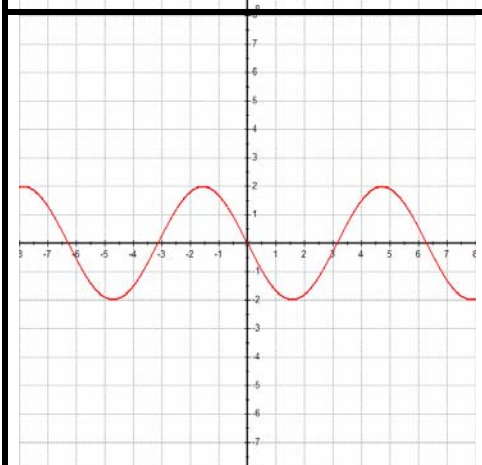
$$f(x) = e^{-x} + 2$$

$$f'(x) = -e^{-x}$$



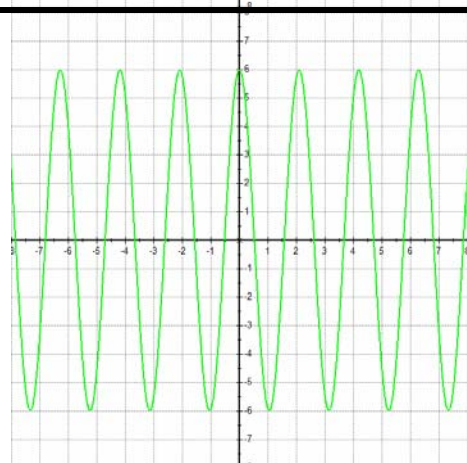
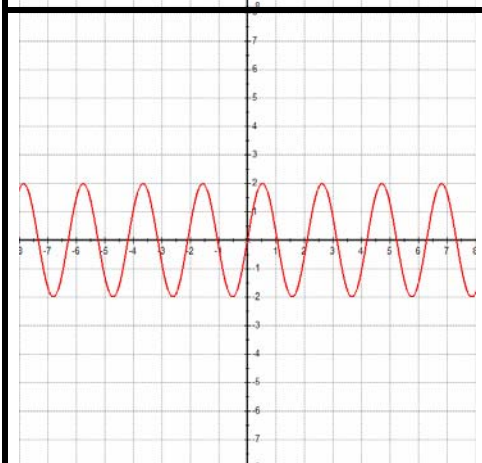
$$f(x) = \sin(x)$$

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



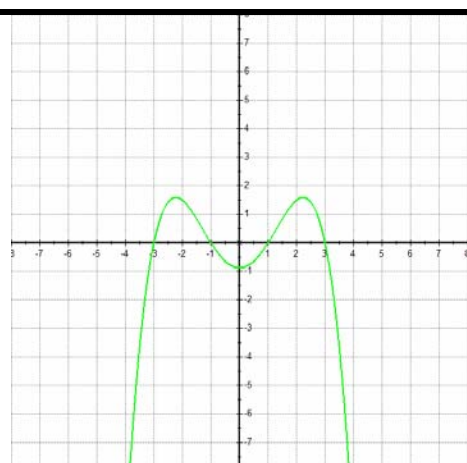
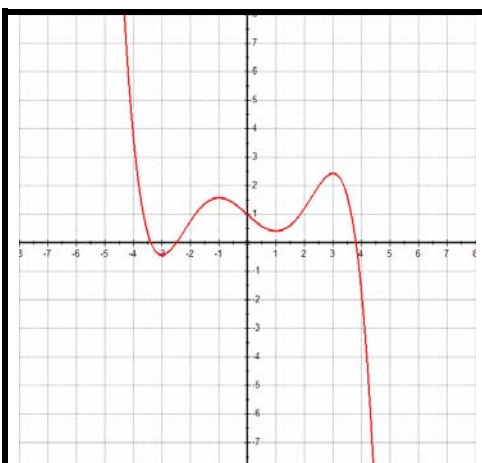
$$f(x) = -2 \cdot \sin(x)$$

$$f'(x) = -2 \cdot \cos(x)$$



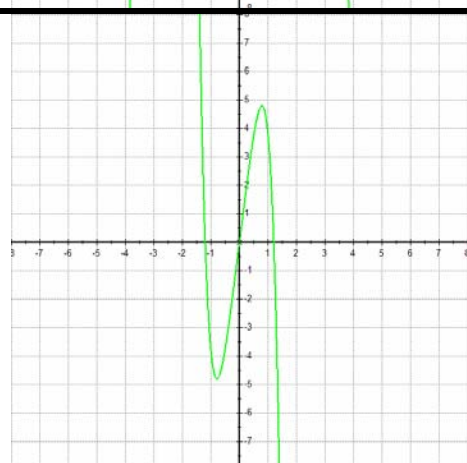
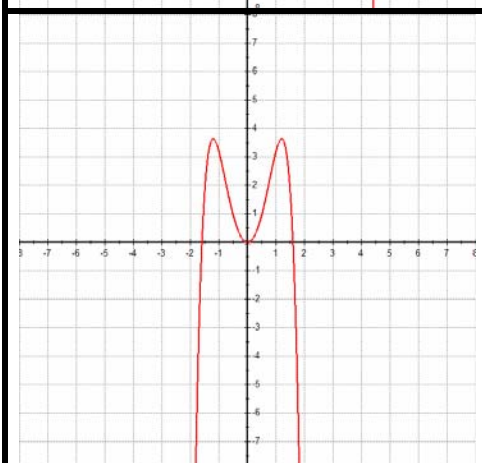
$$f(x) = 2 \cdot \sin(3x)$$

$$f'(x) = 6 \cdot \cos(3x)$$



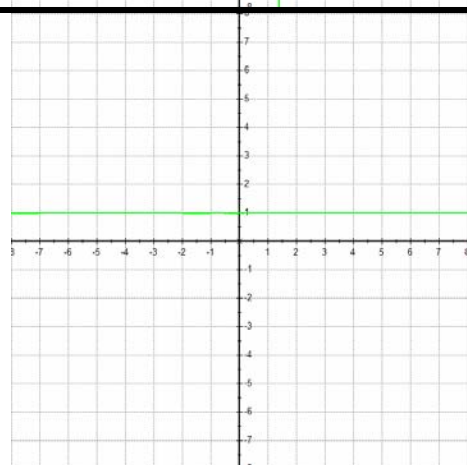
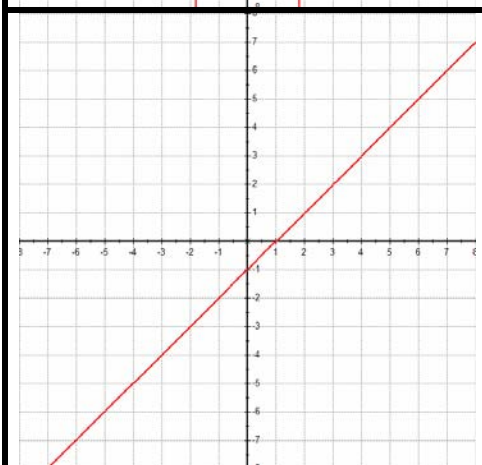
$$f(x) = -\frac{1}{50}x^5 + \frac{1}{3}x^3 - \frac{9}{10}x + 1$$

$$f'(x) = -\frac{1}{10}x^4 + x^2 - \frac{9}{10}$$



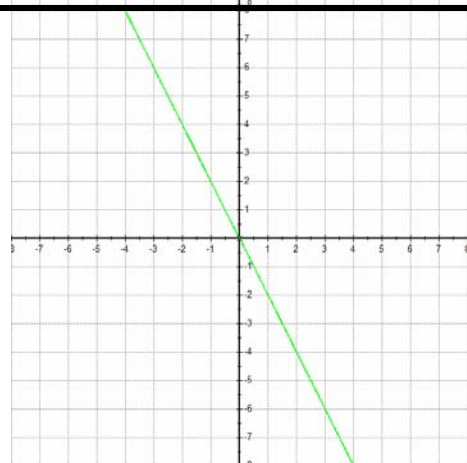
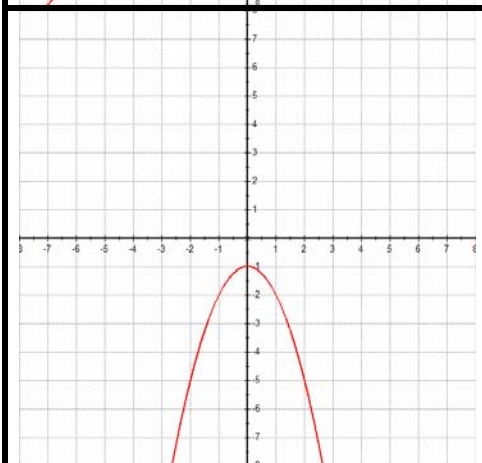
$$f(x) = -\frac{1}{2}x^6 - \frac{3}{10}x^4 + 4x^2$$

$$f'(x) = -3x^5 - \frac{6}{5}x^3 + 8x$$



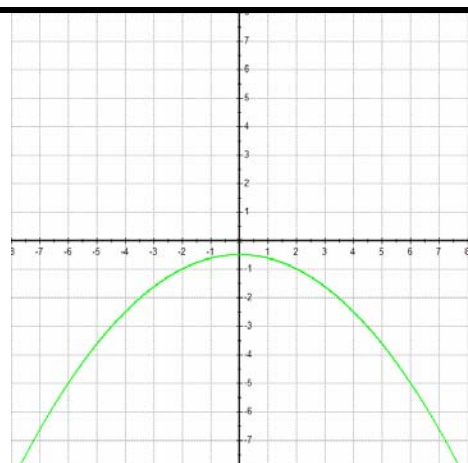
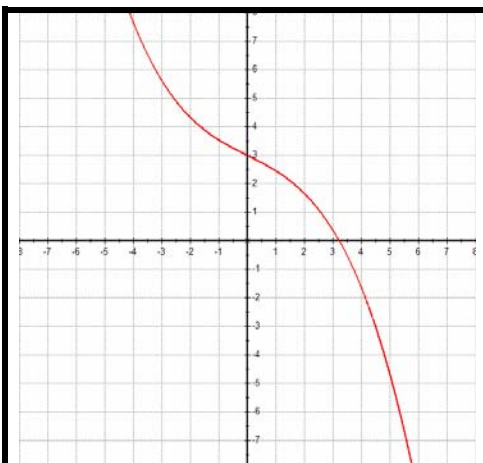
$$f(x) = x - 1$$

$$f'(x) = 1$$



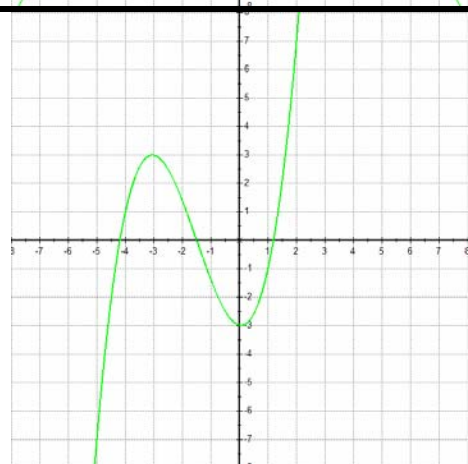
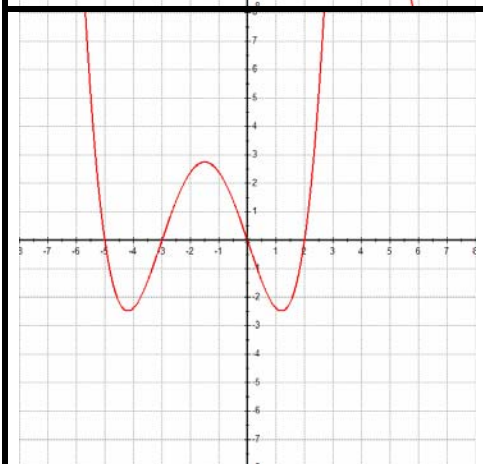
$$f(x) = -x^2 - 1$$

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



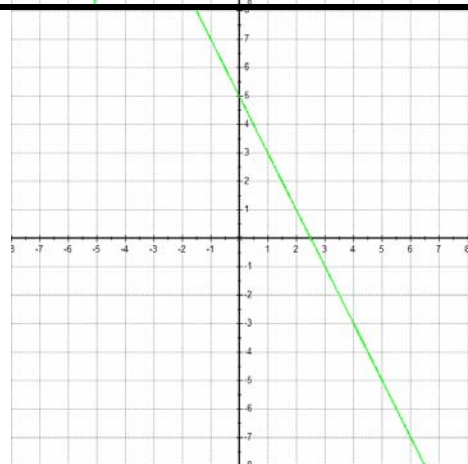
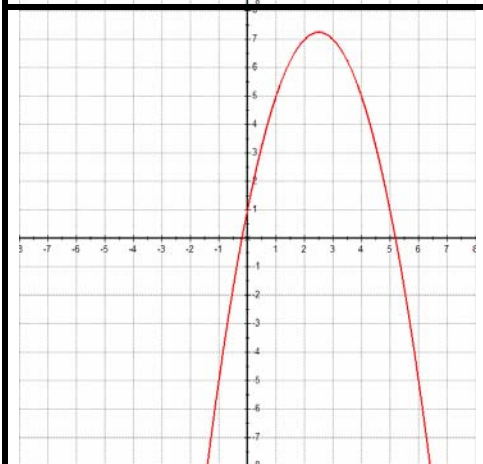
$$f(x) = -\frac{1}{24}x^3 - \frac{1}{2}x + 3$$

$$f'(x) = -\frac{1}{8}x^2 - \frac{1}{2}$$



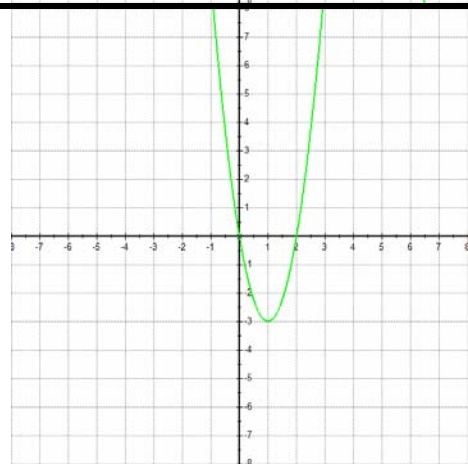
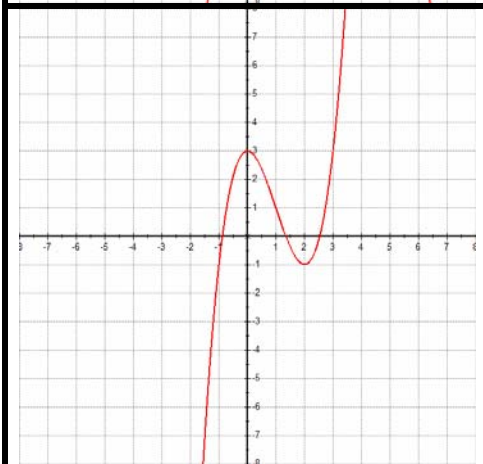
$$f(x) = x^4 + 6x^3 - x^2 - 30x$$

$$f'(x) = 4x^3 + 18x^2 - 2x - 30$$



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

$$f'(x) = -2x + 5$$



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

$$f'(x) = 3x^2 - 6x$$

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$$f(x) = x^2$$
$$f'(x) = 2x$$

$$f(x) = x^2$$
$$f'(x) = 2x$$

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

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

$$f(x) = x^4$$
$$f'(x) = 4x^3$$

$$f(x) = x^4$$
$$f'(x) = 4x^3$$

$$f(x) = x^5$$
$$f'(x) = 5x^4$$

$$f(x) = x^5$$
$$f'(x) = 5x^4$$



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

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

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

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

$$f(x) = 3x^2 - 3$$
$$f'(x) = 6x$$

$$f(x) = 3x^2 - 3$$
$$f'(x) = 6x$$

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

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

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

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

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

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

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

$$f'(x) = -3x + 2$$

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

$$f'(x) = -3x + 2$$

$$f(x) = -3x + 2$$

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

$$f(x) = -3x + 2$$

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

$$f(x) = \frac{1}{12}x^4 - \frac{1}{2}x^2 + 4$$

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

$$f(x) = \frac{1}{12}x^4 - \frac{1}{2}x^2 + 4$$

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

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

$$f'(x) = x^2 - 1$$

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

$$f'(x) = x^2 - 1$$

$$f(x) = e^{x-3} - x - 3$$

$$f'(x) = e^{x-3} - 1$$

$$f(x) = e^{x-3} - x - 3$$

$$f'(x) = e^{x-3} - 1$$

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

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

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

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

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

$$f'(x) = \frac{6}{x}$$

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

$$f'(x) = \frac{6}{x}$$

$$f(x) = e^{-x} + 2$$
$$f'(x) = -e^{-x}$$

$$f(x) = e^{-x} + 2$$
$$f'(x) = -e^{-x}$$

$$f(x) = \sin(x)$$
$$f'(x) = \cos(x)$$

$$f(x) = \sin(x)$$
$$f'(x) = \cos(x)$$

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

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

$$f(x) = 2 \cdot \sin(3x)$$
$$f'(x) = 6 \cdot \cos(3x)$$

$$f(x) = 2 \cdot \sin(3x)$$
$$f'(x) = 6 \cdot \cos(3x)$$

$$f(x) = -\frac{1}{50}x^5 + \frac{1}{3}x^3 - \frac{9}{10}x + 1$$

$$f'(x) = -\frac{1}{10}x^4 + x^2 - \frac{9}{10}$$

$$f(x) = -\frac{1}{50}x^5 + \frac{1}{3}x^3 - \frac{9}{10}x + 1$$

$$f'(x) = -\frac{1}{10}x^4 + x^2 - \frac{9}{10}$$

$$f(x) = -\frac{1}{2}x^6 - \frac{3}{10}x^4 + 4x^2$$

$$f'(x) = -3x^5 - \frac{6}{5}x^3 + 8x$$

$$f(x) = -\frac{1}{2}x^6 - \frac{3}{10}x^4 + 4x^2$$

$$f'(x) = -3x^5 - \frac{6}{5}x^3 + 8x$$

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

$$f'(x) = 1$$

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

$$f'(x) = 1$$

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

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

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

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

$$f(x) = -\frac{1}{24}x^3 - \frac{1}{2}x + 3$$

$$f'(x) = -\frac{1}{8}x^2 - \frac{1}{2}$$

$$f(x) = -\frac{1}{24}x^3 - \frac{1}{2}x + 3$$

$$f'(x) = -\frac{1}{8}x^2 - \frac{1}{2}$$

$$f(x) = x^4 + 6x^3 - x^2 - 30x$$

$$f'(x) = 4x^3 + 18x^2 - 2x - 30$$

$$f(x) = x^4 + 6x^3 - x^2 - 30x$$

$$f'(x) = 4x^3 + 18x^2 - 2x - 30$$

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

$$f'(x) = -2x + 5$$

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

$$f'(x) = -2x + 5$$

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

$$f'(x) = 3x^2 - 6x$$

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

$$f'(x) = 3x^2 - 6x$$