

Starter

solve $x^3 + 2x^2 - 4x = x + 6$

The values of x for which $f(x) = 0$ are the real zeros of the function and the x -intercepts of its graph

zeros are $\{-3, -1, 2\}$

replace 0 with $f(x)$

$$f(x) = x^3 + 2x^2 - 5x - 6$$

graph the function $f(x)$

$$f(x) = x^3 + 2x^2 - 5x - 6$$

simplify

$$x^3 + 2x^2 - 5x - 6 = 0$$

make the equation $= 0$

$$x^3 + 2x^2 - 4x - x - 6 = 0$$

