

14th December

Corbettmaths

Show the equation

$$x^3 + 6x = 1$$

has a solution between $x=0$ and $x=1$

Show the equation

$$x^3 + 6x = 1$$

can be rearranged to give

$$x = \frac{1}{6} - \frac{x^3}{6}$$

Starting with $x_1 = 0$

use the iteration formula

$$x_{n+1} = \frac{1}{6} - \frac{(x_n)^3}{6}$$

three times to find a solution to

$$x^3 + 6x = 1$$

Expand and simplify

$$(2 - \sqrt{3})^2$$

$$f(x) = 4x + 1$$

Find

$$f^{-1}(5)$$