

find the inverse of $f(x) = 3x^3 - 7$

$$y = 3x^3 - 7$$

$$x = 3y^3 - 7$$

$$x + 7 = 3y^3$$

$$\frac{x+7}{3}$$

$$= \sqrt[3]{\frac{1}{3}x + \frac{7}{3}}$$