

Class Discussion

Unit 1 Topic 6 Part 2 Inverse Function 2

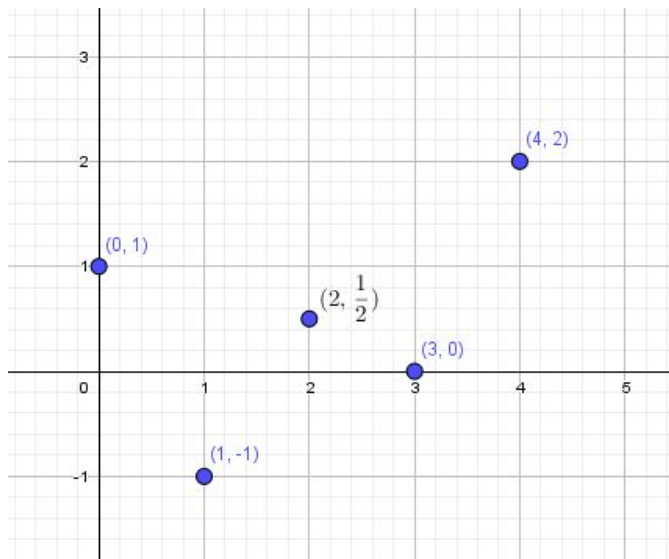
if f and g are a pair of inverse functions, then

the range of g is the domain of f ,

the domain of f is the range of g .

Example 1

Given the graph of $f(x)$



And $h(x) = 2x^2 + 3$

(a) Evaluate $f^{-1}(0)$

(b) Evaluate $h \circ f^{-1}(2)$

Example 2

Let $f(x) = \frac{2x}{x+1}, x > -1$

(a) Find the range and domain of both f and f^{-1}

(b) Graph f and f^{-1}

(c) Find the intersection of f and f^{-1} if possible (algebraically and graphically)