

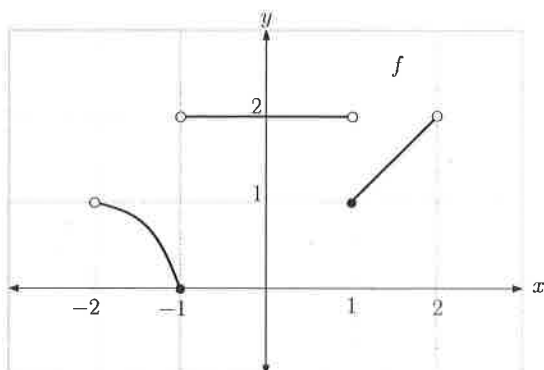
Score: _____ out of 10.

Math 201 - Quiz #1

Name: _____

key

1. Consider the graph of the given function $y = f(x)$ below.



(a) $f(-1) =$ 0

(b) $f(0) =$ 2

(c) $f(1) =$ 1

(d) Domain of f (use interval notation): (-2, 2)

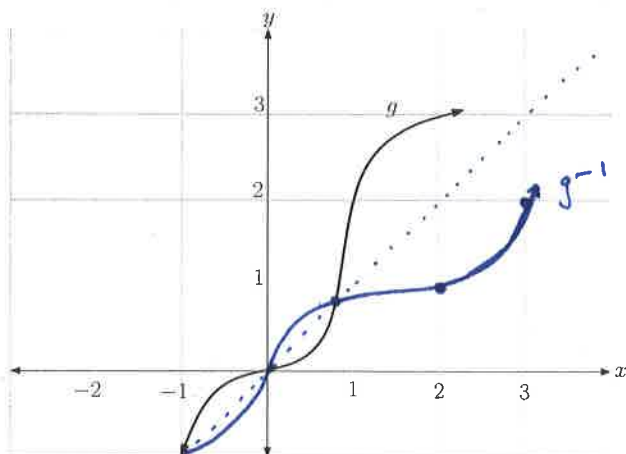
(e) Range of f (use interval notation): [0, 2]

(f) Is f injective (one-to-one)?

NO

(it does not pass the horizontal line test if you consider $y=2$)

2. Consider the graph of the given bijective function $y = g(x)$ below.



- (a) Using the graph, how can we tell g is injective (one-to-one)?

It passes the horizontal line test.

(b) $g^{-1}(2) =$ 1

- (c) Using the graph of $g(x)$ above sketch the graph of $g^{-1}(x)$.

(d) Without using the graph, what is the value of $(g^{-1} \circ g)(2014) =$ 2014