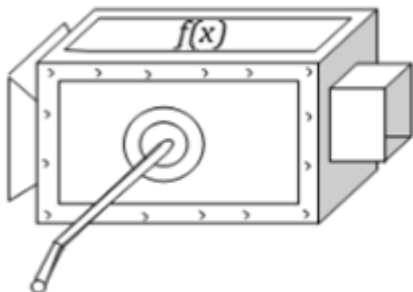
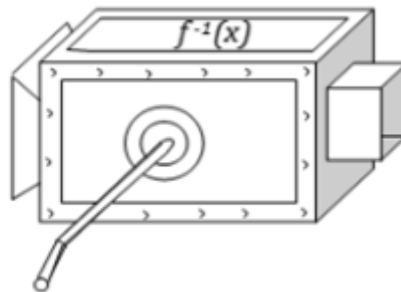


Inverse of a Function *conceptually*



$$f(x) = \frac{3x-4}{2}$$



$$f^{-1}(x) =$$



1. Find the inverse functions of the following.

a. $f(x) = 5x + 3$



b. $g(x) = \frac{3x+1}{5}$



c. $h(x) = \frac{x}{2} - 6$

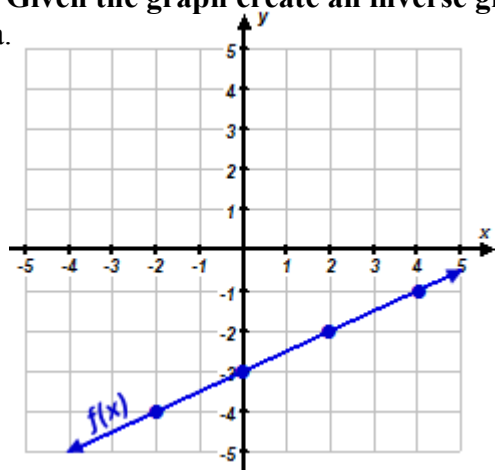


d. $g(x) = 2x^3 + 6$



2. Given the graph create an inverse graph and determine if the inverse is a function.

a.

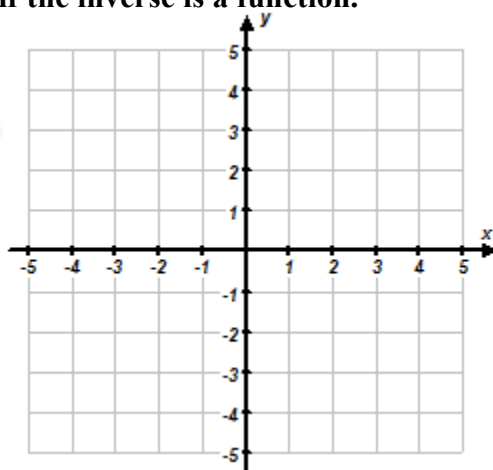


Create an
inverse of the
graph shown

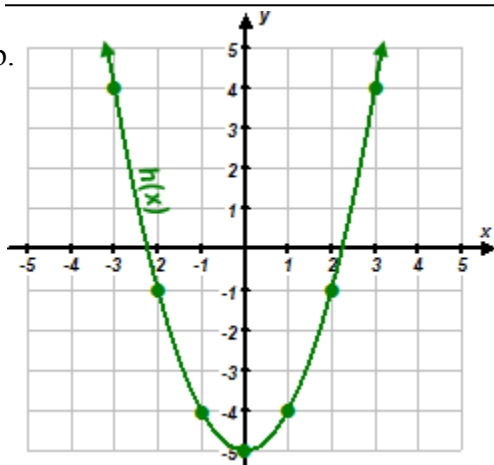
Is the inverse a
function?

CIRCLE ONE:

YES NO



b.

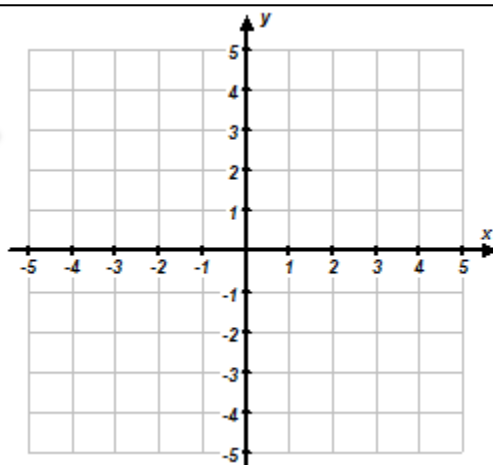


Create an
inverse of the
graph shown

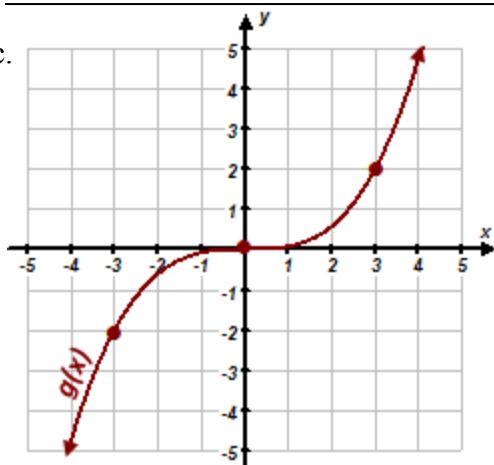
Is the inverse a
function?

CIRCLE ONE:

YES NO



c.

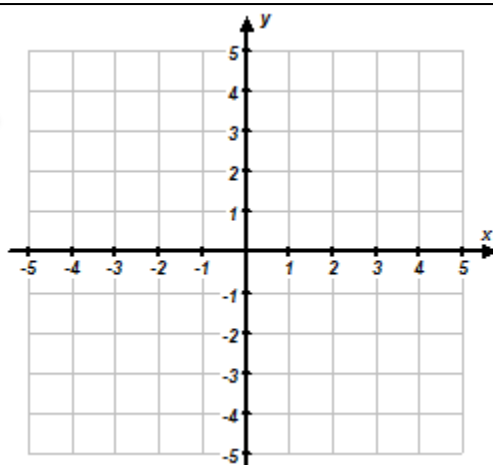


Create an
inverse of the
graph shown

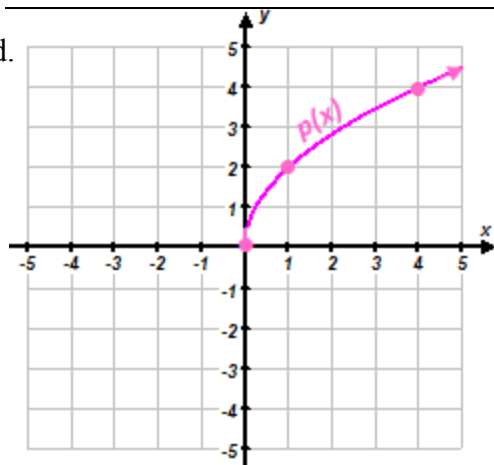
Is the inverse a
function?

CIRCLE ONE:

YES NO



d.

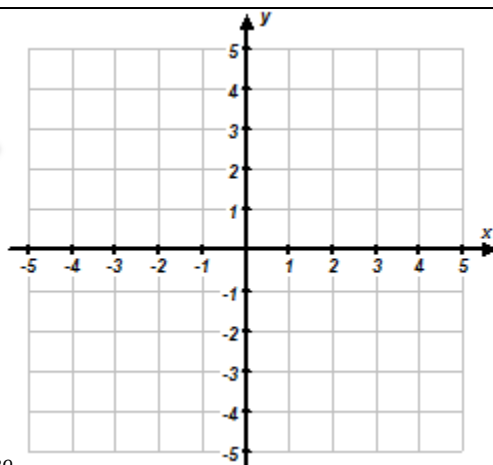


Create an
inverse of the
graph shown

Is the inverse a
function?

CIRCLE ONE:

YES NO



3. Which two functions could be inverses of one another based on the partial set of values in the table?

x	$f(x)$
-2	0
-1	2
0	-2
2	-1

x	$g(x)$
0	-2
2	-1
-2	0
-1	2

x	$h(x)$
-2	-1
-1	-2
0	2
2	0

4. Find the inverse functions of the following using the  flip technique.

a. $g(x) = \frac{3x+1}{5}$

b. $h(x) = \frac{3}{2x+1} ; x \neq -\frac{1}{2}$

c. $f(x) = \frac{x+3}{x-2} ; x \neq 2$

d. $m(x) = \frac{2x-3}{3x+1} ; x \neq -\frac{1}{3}$

5. Find the inverse functions of the following using any method:

a. $f(x) = 2x^2 - 3x$

b. $g(x) = x^2 - 4$; $x \geq 0$

6. Verify which of the following are inverses of one another by considering $f(g(x))$ and $g(f(x))$

a. $f(x) = 4x$
 $g(x) = \frac{x}{4}$

b. $f(x) = 2x + 1$
 $g(x) = \frac{x-1}{2}$

c. $f(x) = \frac{x}{2} - 3$
 $g(x) = 2x + 3$

d. $f(x) = 2x^3 - 1$
 $g(x) = \sqrt[3]{\frac{x+1}{2}}$