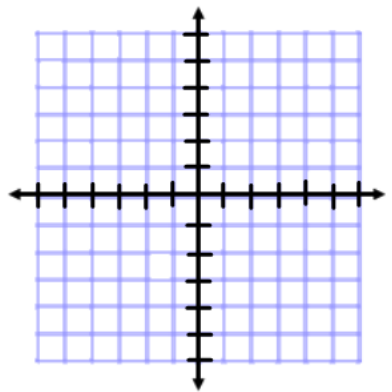
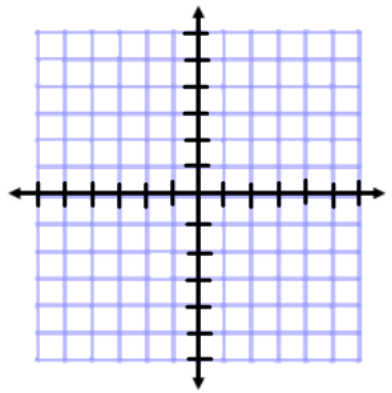


In each problem, find the inverse of the function then graph both the function and its inverse. It is a good idea to use different shapes to distinguish between the function and its inverse.

1) $f(x) = (2,4) (-5,3) (-2,-3) (1,1) (-4,-4) (-1,-2) (3,-1)$
 $f^{-1}(x) =$

2) $h(x) = (0,0) (-2,4) (-1,-4) (2,2) (-3,-3) (-4,4) (1,-1)$
 $h^{-1}(x) =$



3) What do you notice about the function and its inverse?

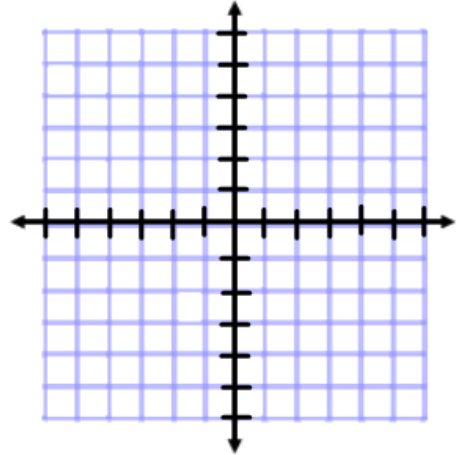
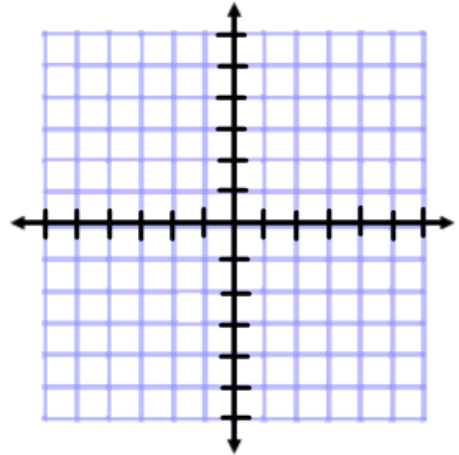
Find the inverse of each function; then graph both the function and its inverse on your calculator.

4) $b(x) = 3x - 2$

5) $n(x) = x^3$

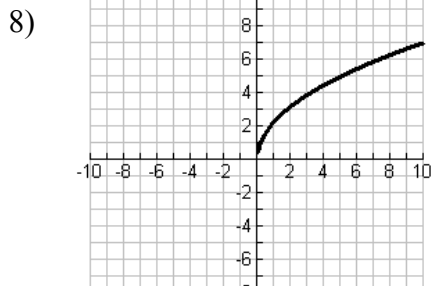
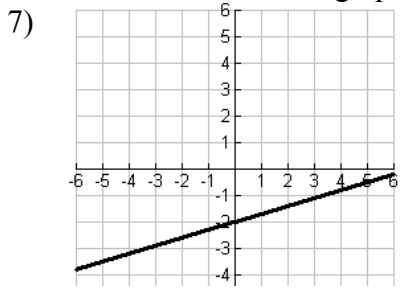
$b^{-1}(x) =$

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



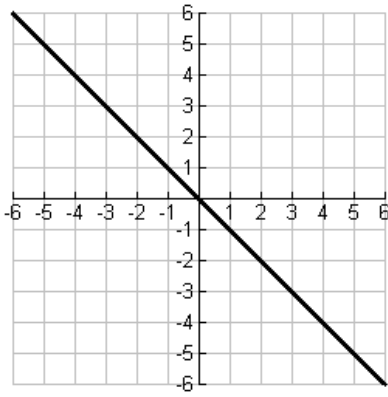
6) What do you notice about a graph and its inverse?

Draw the inverse of each graph

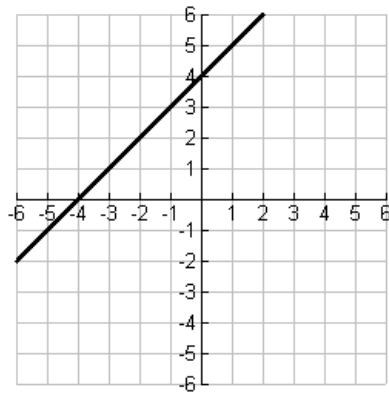


Draw the inverse of each graph, if the function is its own inverse write 'Own inverse'

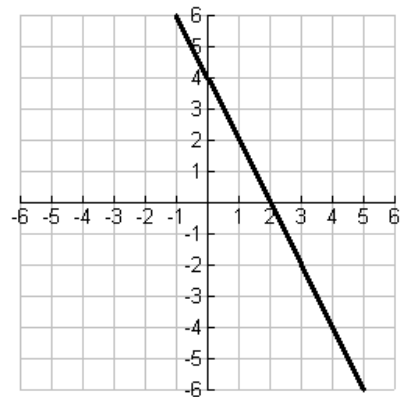
9)



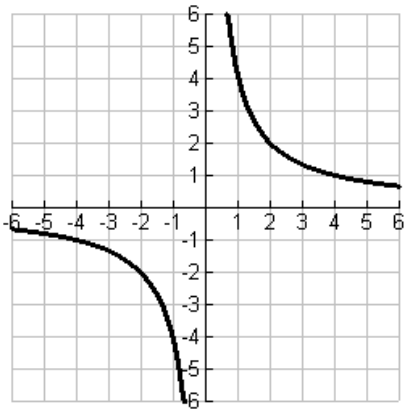
10)



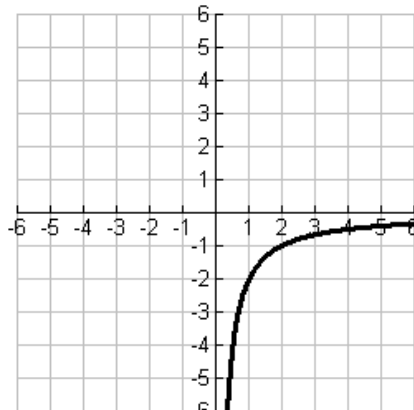
11)



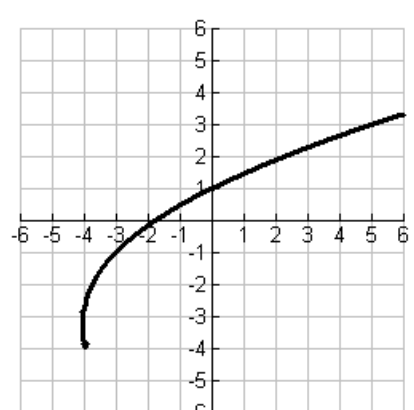
12)



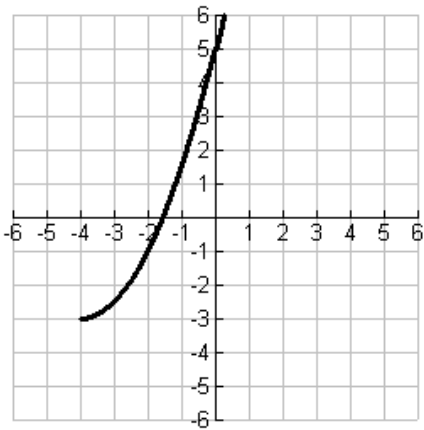
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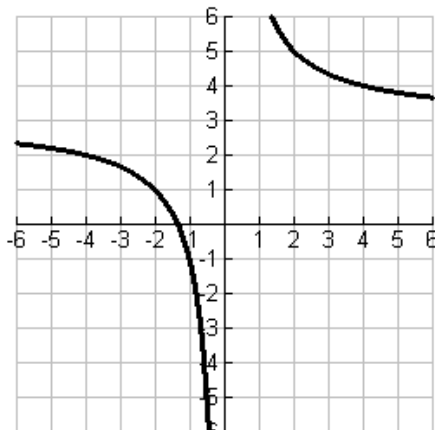
14)



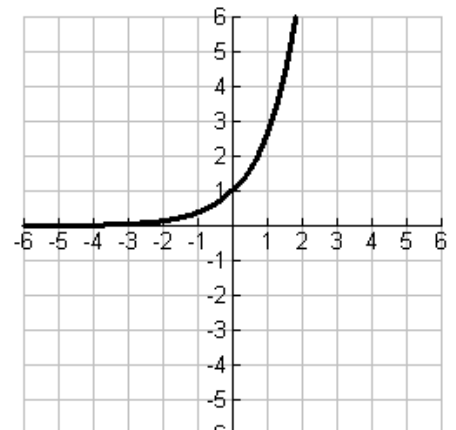
15)



16)

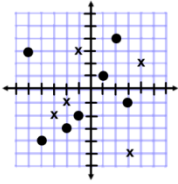


17)

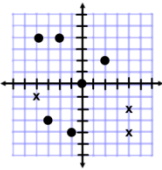


Answers

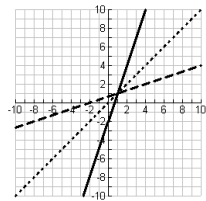
- 1) $f^{-1}(x) = (4,2) (3,-5) (-3,-2)$
 $(1,1) (-4,-4) (-2,-1)$
 $(-1,3)$



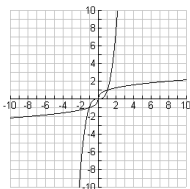
- 2) $h^{-1}(x) = (0,0) (4,-2)$
 $(-4,-1) (2,2) (-3,-3)$
 $(4,-4) (-1,1)$



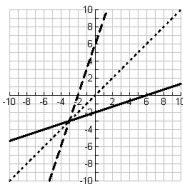
- 3) Reflection on line $y = x$
 4) $b^{-1}(x) = (x+2)/3$



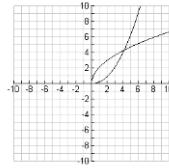
- 5) $n^{-1}(x) = \sqrt[3]{x}$



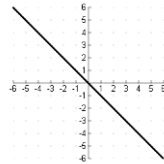
- 6) Reflection on line $y = x$
 7)



8)

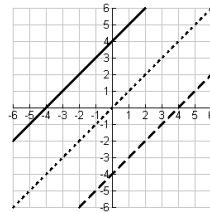


9)

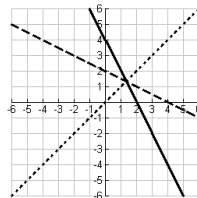


(Own inverse)

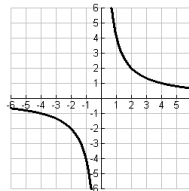
10)



11)

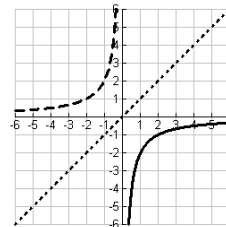


12)

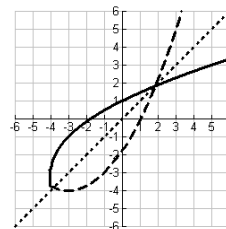


Own inverse

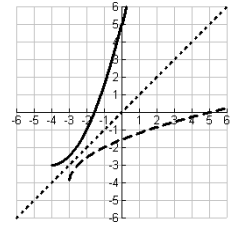
13)



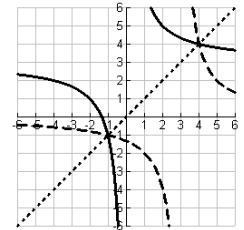
14)



15)



16)



17)

