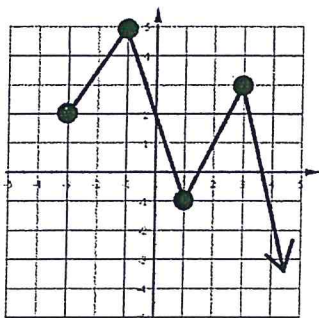
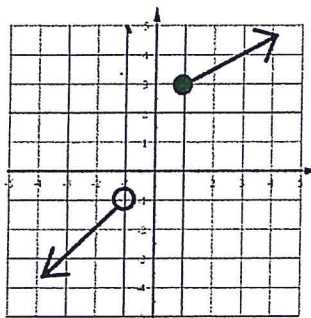


Algebra 2 Bellwork Tue, May 5, 2015 3rd hour

1. State the Domain and Range of the Inverse Relation of each.



a)



b)

2. Write the equation of the inverse relation for each.

a) $f(x) = \frac{7(x-9)^3 + 1}{8}$

b) $y = \sqrt{\frac{5x+3}{2}} - 11$

3. Use what you may know about the graph of each or graph them using the graphing calculator to determine if the inverse relation of each is a function or not.

a) $f(x) = -\frac{1}{2}|x-3| + 4$

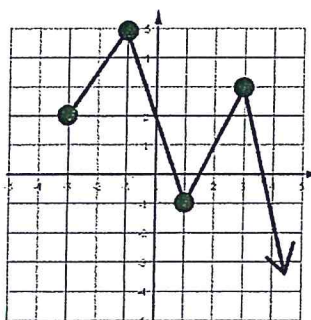
b) $y = 2^{x+3} - 6$

c) $y = \frac{1}{x+2} - 3$

d) $f(x) = 0.2x^3 - 3.2x$

Algebra 2 Bellwork Tue, May 5, 2015 3rd hour **ANSWERS**

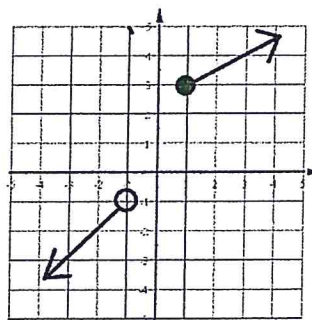
1. State the Domain and Range of the Inverse Relation of each.



a)

original
D: $x \geq -3$
R: $y \leq 5$

$f^{-1}(x)$
D: $x \leq 5$
R: $y \geq -3$



b)

original
D: $x < -1, x \geq 1$
R: $y < -1, y \geq 3$
 $f^{-1}(x)$
D: $x < -1, x \geq 3$
R: $y < -1, y \geq 1$

2. Write the equation of the inverse relation for each.

a) $f(x) = \frac{7(x-9)^3 + 1}{8}$

b) $y = \sqrt{\frac{5x+3}{2}} - 11$

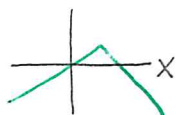
$f^{-1}(x) = \sqrt[3]{\frac{8x-1}{7}} + 9$

$f^{-1}(x) = \frac{2(x+11)^2 - 3}{5}$

3. Use what you may know about the graph of each or graph them using the graphing calculator to determine if the inverse relation of each is a function or not.

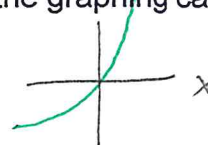
a) $f(x) = -\frac{1}{2}|x-3| + 4$

NO



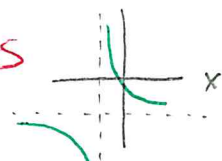
b) $y = 2^{x+3} - 6$

YES



c) $y = \frac{1}{x+2} - 3$

YES



d) $f(x) = 0.2x^3 - 3.2x$

NO

