Algebraic Reasoning

Name:_____

Per:_____

POINTS:____

Classwork #23 Quiz

Be sure to include your work when appropriate.

Generate the inverse of the function. Determine if the inverse is a function. Explain your answer.

1.

x	y
-2	7
-1	4
0	3
1	4
2	7

2.

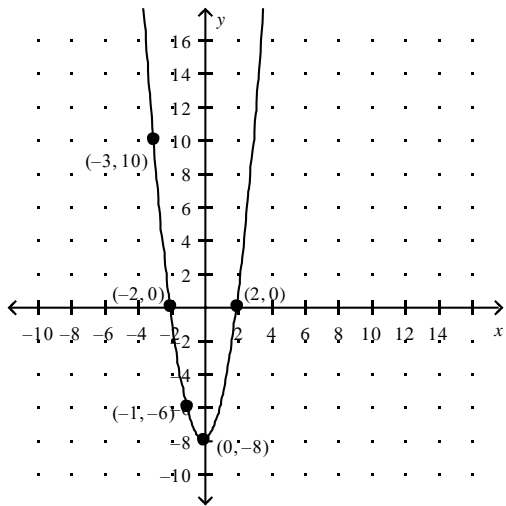| x	y
-1	-2
0	-1
1	1
2	5
3	13

Generate the equation of the inverse of the function.

3. $f(x) = \frac{1}{2}(x - 4)^2 + 10$
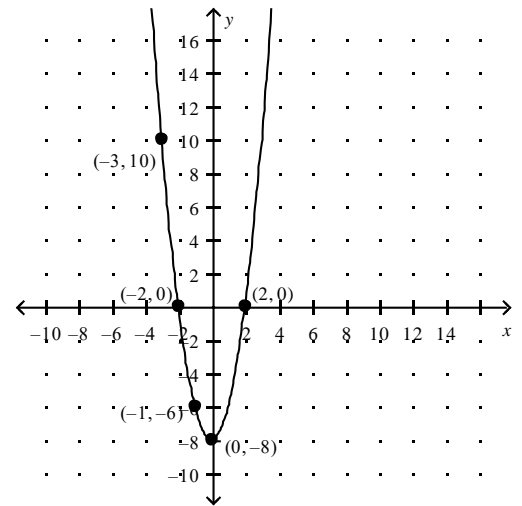
4. $f(x) = (-3x - 9)^3 - 5$

Generate the graph of the inverse of the function. Determine the *x*-intercept(s) and *y*-intercept(s) of the original function and the *x*-intercept(s) and *y*-intercept(s) of the inverse of the function.
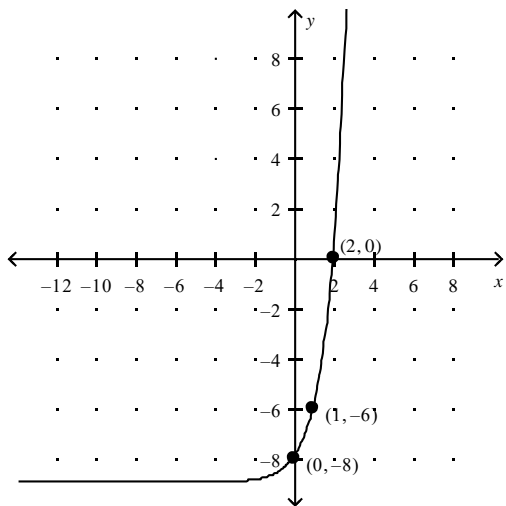
Generate the graph of the inverse of the function. Determine the *x*-intercept(s) and *y*-intercept(s) of the original function and the *x*-intercept(s) and *y*-intercept(s) of the inverse of the function.

5.

5.

6.

6.