

Honors Algebra 2 – Test Review

Transformations of Functions

Name _____
Date _____ Hour _____

Graph each parent function. Fill in the parent function name and equation. Describe the transformation. Then, on the same graph, graph the transformation.

1) $f(x) = (x - 3)^2 + 5$

Parent function

Name: _____

Equation: _____

Transformation: _____

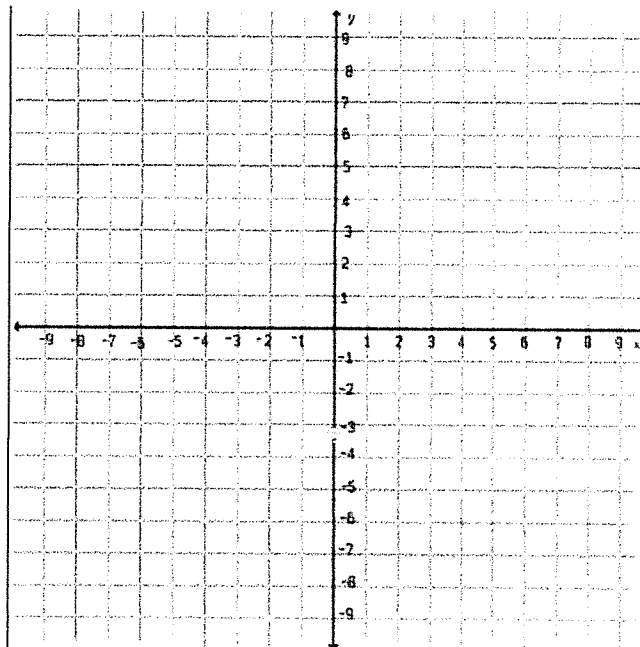
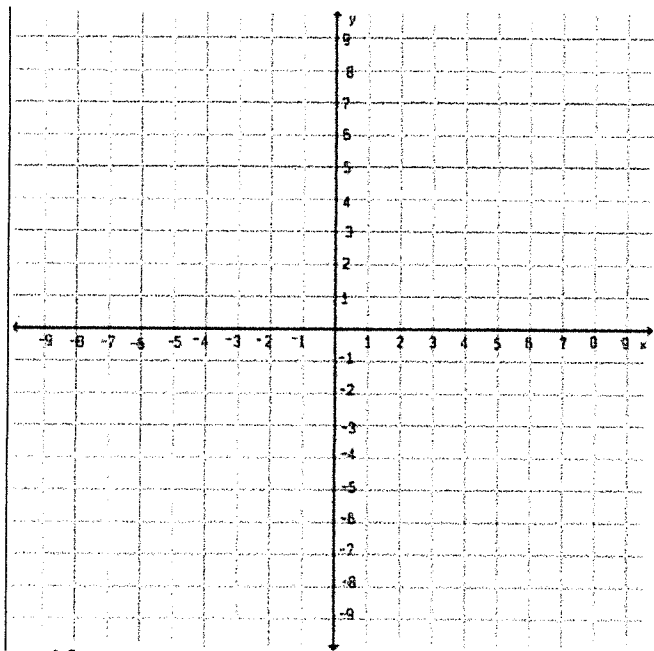
2) $f(x) = |x + 3| - 2$

Parent function

Name: _____

Equation: _____

Transformation: _____



Give the name of the parent function and describe the transformation(s) represented.

3. $g(x) = .3\sqrt{x-4}$ Name _____ Transformation(s) _____

4. $f(x) = \log(x+2) - 1$ Name _____ Transformation(s) _____

5. $h(x) = -|x| + 3$ Name _____ Transformation(s) _____

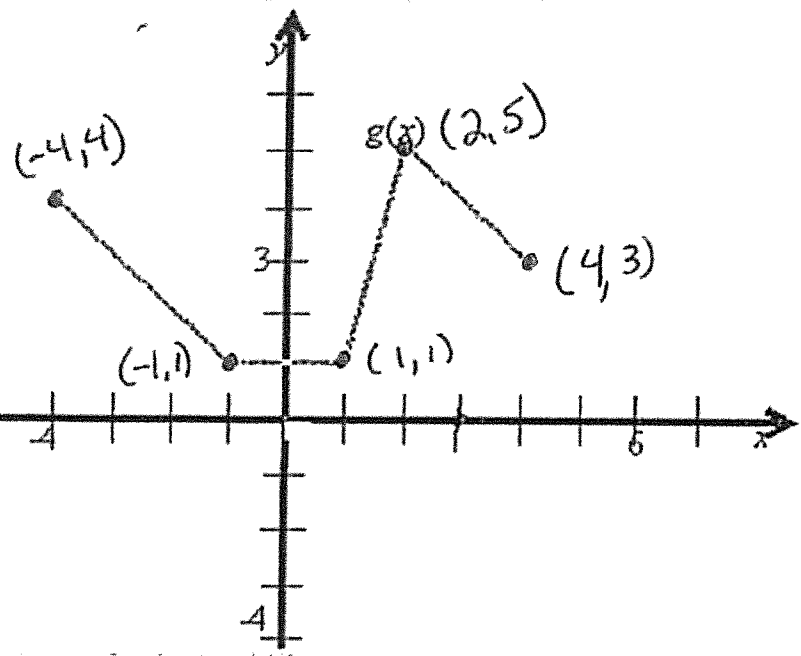
6. $g(x) = \sqrt[3]{x} - 8$ Name _____ Transformation(s) _____

7. $f(x) = 3(x-5)^2$ Name _____ Transformation(s) _____

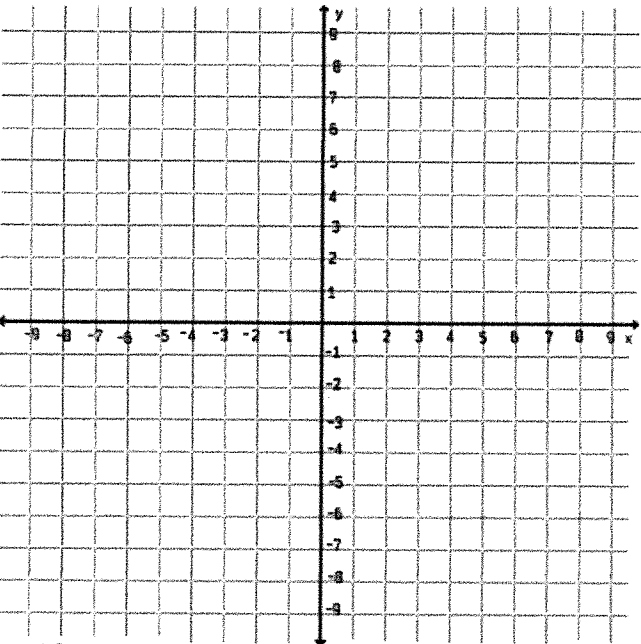
8. $g(x) = \left(\frac{1}{2}\right)^{x-6} - 3$ Name _____ Transformation(s) _____

9. $h(x) = (x+3)^3 + 4$ Name _____ Transformation(s) _____

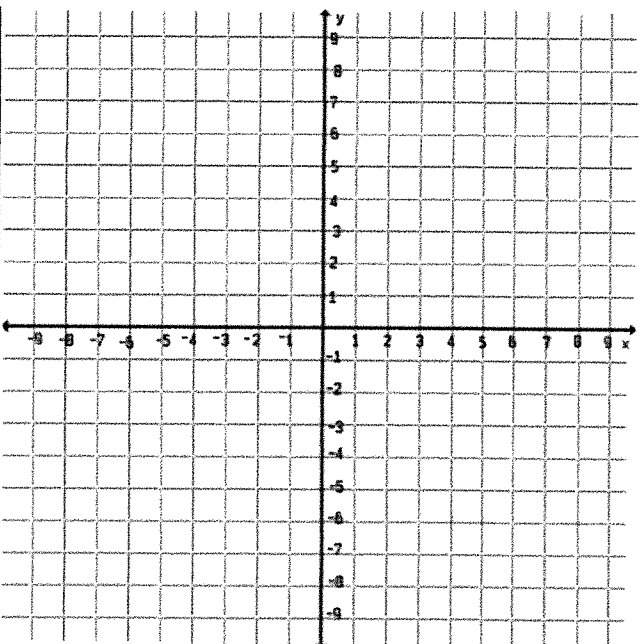
Using the arbitrary function below, describe each transformation and graph the transformed function. Make a table of values for the original function and for each transformation.



10. $y = f(x - 2) + 3$



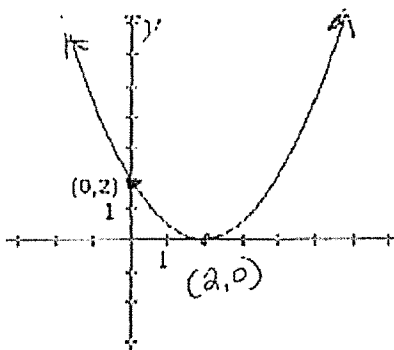
11. $y = -2f(x)$



Describe the transformations, find a , and write an equation for each graph.

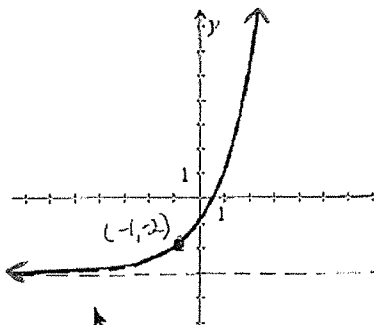
12. Parent
Transformation(s)

Equation



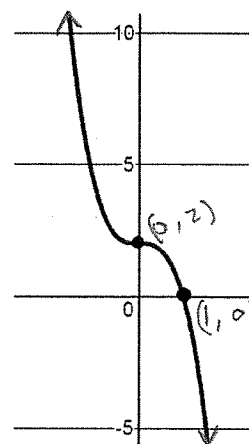
13. Parent
Transformation(s)

Equation



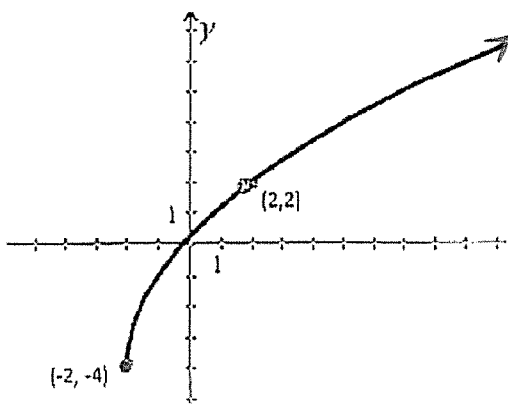
14. Parent
Transformation(s)

Equation



15. Parent
Transformations

Equation



16. Parent
Transformations

Equation

