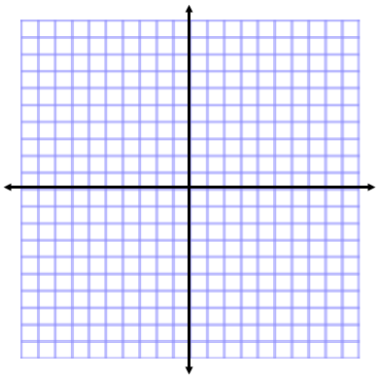
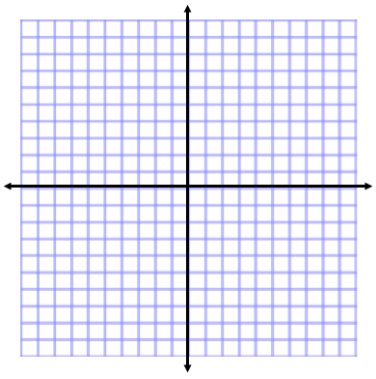
Algebra 2 Transformations Practice **Name** _____

 # 1- 7 Give the name of the parent function and describe the transformation represented, then sketch the graph.



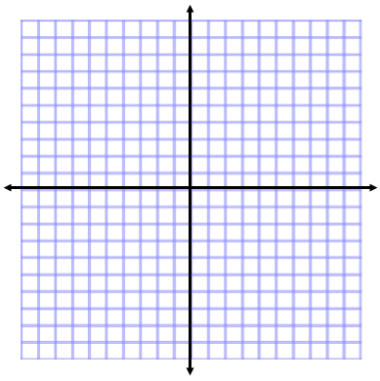
1. $g(x)=\frac{1}{x}-1$ Parent: _____

Transformations:_____



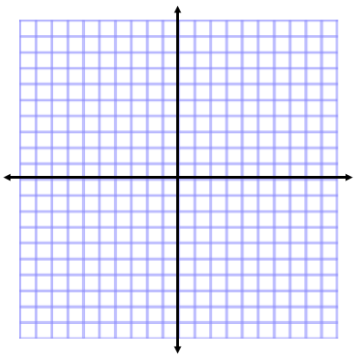
2. $f(x)=2|x-1|$ Parent: _____

Transformations:_____



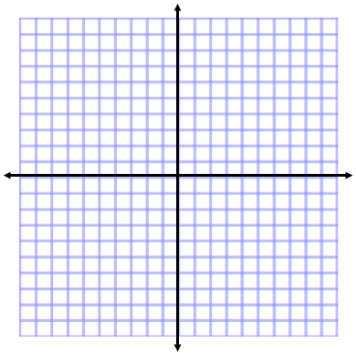
3. $h(x)=-3^x-2$ Parent: _____

Transformations:_____



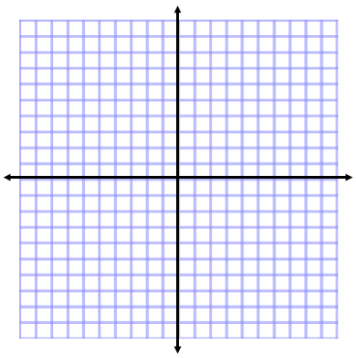
4. $g(x) = -2(x+1)^2 + 3$ Parent: _____

Transformations:_____



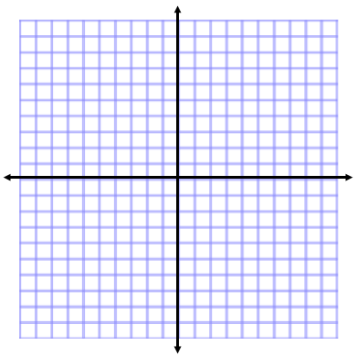
5. $g(x) = \sqrt{x} - 2$ Parent: _____

Transformations:_____



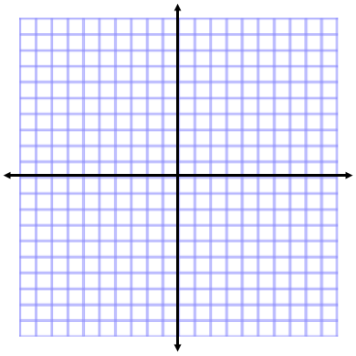
6. $f(x) = |x + 5| - 2$ Parent: _____

Transformations:_____



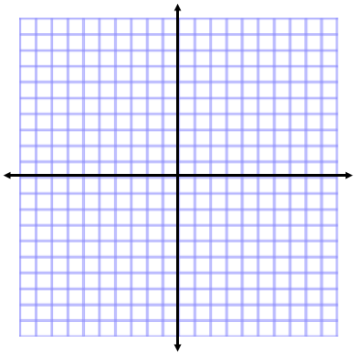
7. $h(x) = x^3 + 4$ Parent: _____

Transformations:_____



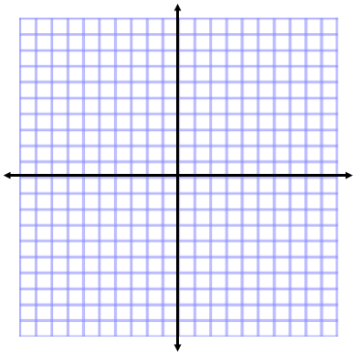
8. $h(x) = -x^3$ Parent: _____

Transformations:_____



9. $h(x) = -|x - 2|$ Parent: _____

Transformations:_____



10. $f(x) = 3(x+3)^2$ Parent: _____

Transformations:_____

#11 - 16 Given the parent function and a description of the transformation, write the equation of the transformed function, f(x).

11.Absolute value - vertical shift up 5, horizontal shift right 3. _____

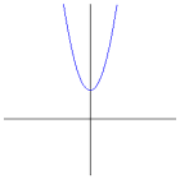
12.Rational - vertical shift down 3 _____

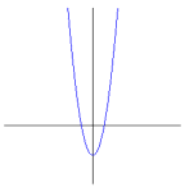
13. Cubic - flipped over the x axis, vertical shift down 2 _____

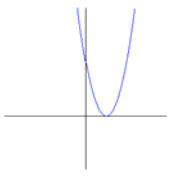
14. Exponential ($y = 2^x$) - vertical stretch by 8 _____

15. Quadratic - vertical stretch by 5, horizontal shift left 8. _____

16. Which graph best represents the function $f(x) = 2x^2 - 2$?

a. 

b. 

c. 

d.