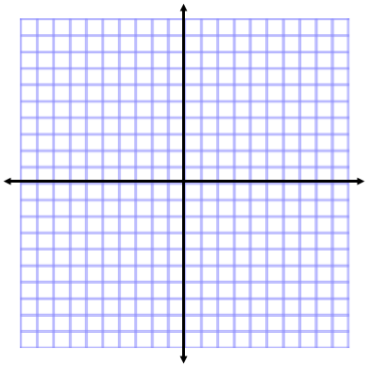
Transformations of Functions **Name _____ Date _____**

Give the name of the parent function and describe the transformation represented.

1. $g(x) = x^2 - 1$

Parent: _____

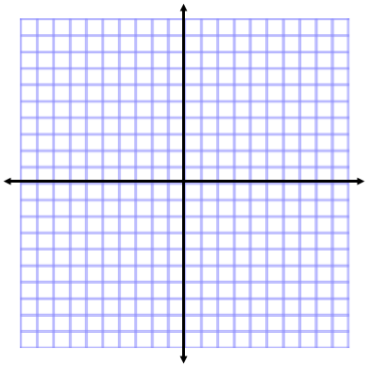
Transformations:_____



2. $f(x) = 2|x-1|$

Parent: _____

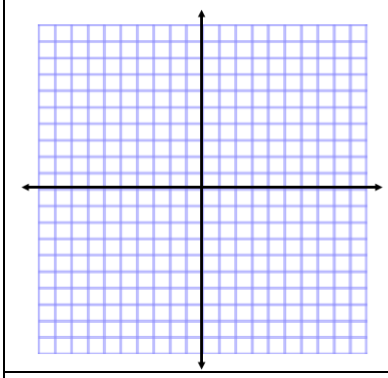
Transformations:_____



3. $h(x) = -3^x - 2$

Parent: _____

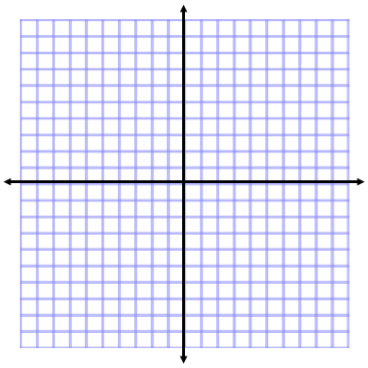
Transformations:_____



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

Parent: _____

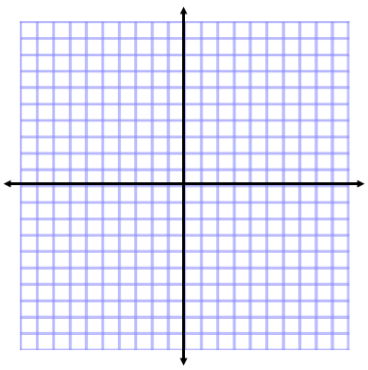
Transformations:_____



5. $g(x) = -3x - 2$

Parent: _____

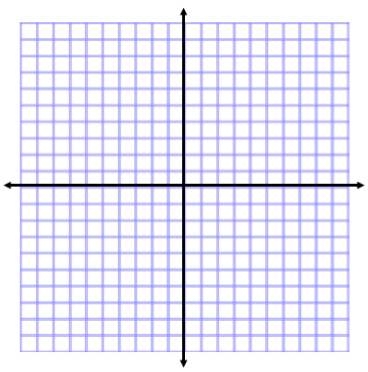
Transformations:_____

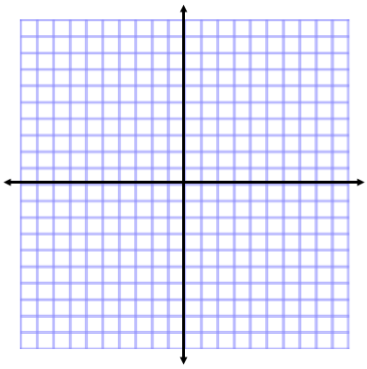
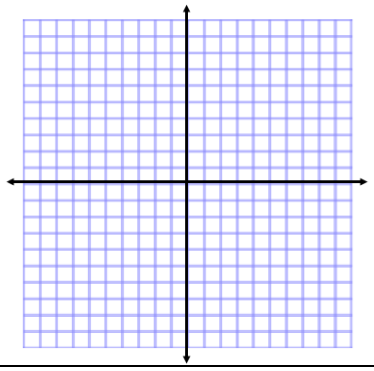


6. $f(x) = |x+5| - 2$

Parent: _____

Transformations:_____



7. $h(x) = -x^2 + 1$ Parent: _____ Transformations:_____ 	8. $h(x) = -\lvert x - 2 \rvert$ Parent: _____ Transformations:_____ 

Given the parent function and a description of the transformation, write the equation of the transformedfunction, f(x).

11.Absolute Value — vertical shift up 5, horizontal shift right 3. _____

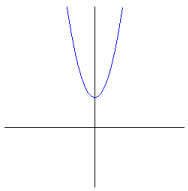
12.Linear — vertical stretch/compression by $\frac{2}{5}$ _____

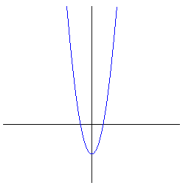
13. Logarithmic — flipped over the x axis, vertical shift down 2 _____

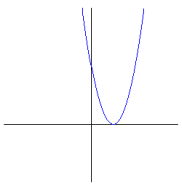
14. Exponential — vertical stretch by 8 _____

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.