**Algebra 3-4 Name**

**Transformation of Functions #2**

 **Period Date**

$\left(\begin{matrix}inside\\=horizontal\\=LIES\end{matrix}\right)\begin{matrix}ouside\\ =vertical\\ =TRUTH\end{matrix}$$\begin{matrix}add or subract=translation (or shift or slide)\\multiplication by a negative=reflection\\multiplication by a number=stretch or shrink\end{matrix}$



 **Use the *x*/*y* table to calculate values for *y* and sketch the graph of the**

**transformed absolute value function. Then describe the**

**transformations.**

 ***f*(*x*) = |*x*|**

1. $ g\left(x\right)=\left|x+2\right|$



2. $g\left(x\right)=\left|x\right|-5$



3. $g\left(x\right)=-\left|x\right|$

4. $g\left(x\right)=\left|x-1\right|+1$

5. $g\left(x\right)=2\left|x\right|-5$

6. $g\left(x\right)=-\left|\frac{1}{3}x\right|$