Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Absolute Value Transformations**



* **a : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**
* **h : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Vertex : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**
* **k : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Describe the transformations:**

1. 
2. 
3. 
4. 

**Graph the following absolute value functions using transformations**

1. 

1. 

 Vertex \_\_\_\_\_\_\_\_\_\_\_ Vertex \_\_\_\_\_\_\_\_\_\_\_

 Transformations: Transformations:

**Write the equation of the absolute value given the graph.**

1. f(x) = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. f(x) = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Vertex \_\_\_\_\_\_\_\_\_

a: \_\_\_\_\_\_\_

Vertex \_\_\_\_\_\_\_\_\_

a: \_\_\_\_\_\_\_

**You try!! Write the equation of the absolute value given the graph.**



1.

f(x) = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

f(x) = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Solving Absolute Value Equations: **

* Isolate the absolute value, then split into 2 equations:  or 
* ALWAYS check for extraneous solutions!
1. Solve for x: 
2. Solve for x: 
3. Solve for x: 
4. Solve for x: 
5. Solve for x: 
6. Solve for x: 