AGS 3 Name: _____ Period: _____ Date: _____

Assignment 3.2

Use the properties of logarithms to rewrite each expression.

1. Complete the tables below for $y = x$, $y = x^3$, and $y = x^5$

x	$y = x$
-1	
0	
1	

x	$y = x^3$
-1	
0	
1	

x	$y = x^5$
-1	
0	
1	

2. Describe what you see in the three tables.

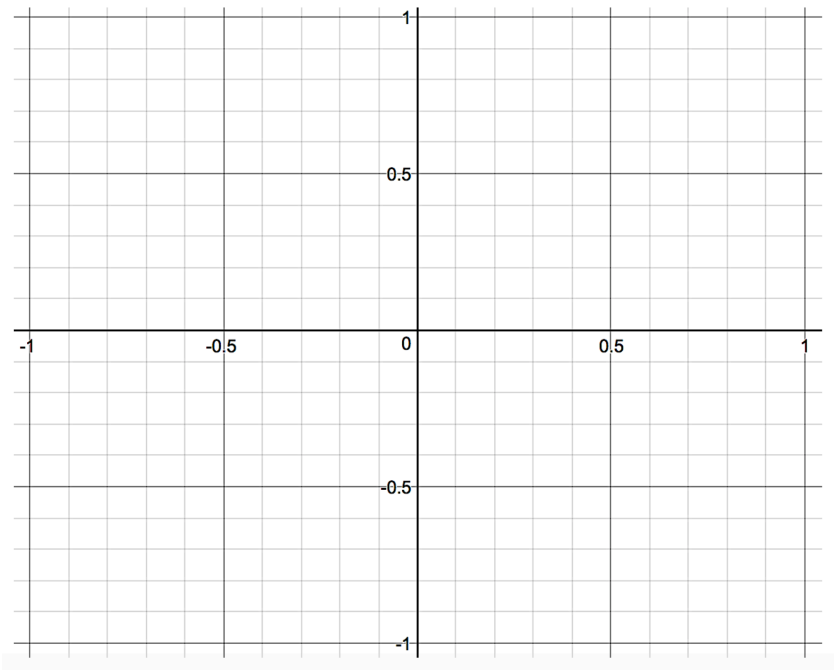
3. Complete the tables below with the additional values.

x	$y = x$
-1	
-½	
0	
½	
1	

x	$y = x^3$
-1	
-½	
0	
½	
1	

x	$y = x^5$
-1	
-½	
0	
½	
1	

4. Graph all three functions on the graph below. Identify each graph.



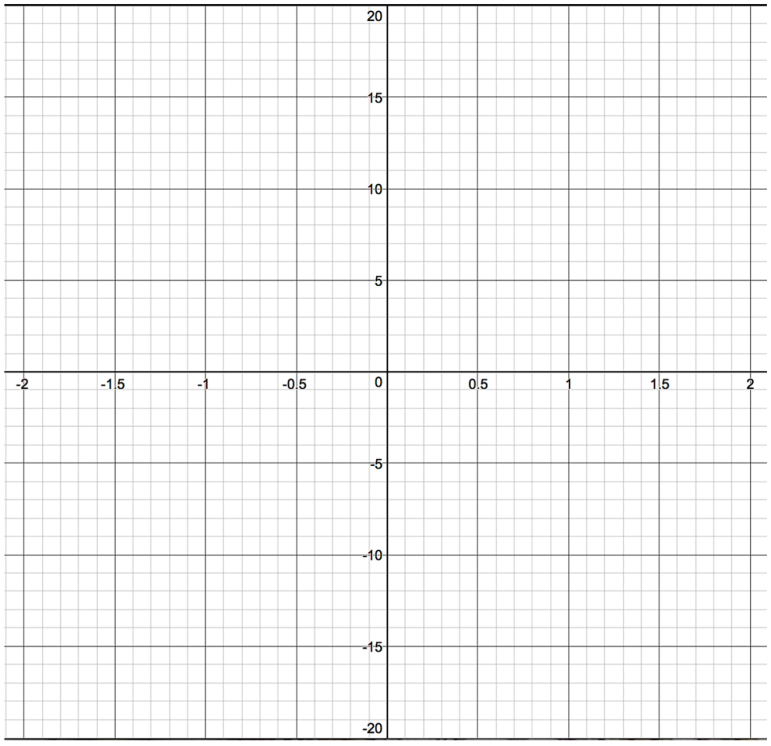
5. Complete the tables below with the additional values.

x	$y = x$
-2	
-1	
-½	
0	
½	
1	
2	

x	$y = x^3$
-2	
-1	
-½	
0	
½	
1	
2	

x	$y = x^5$
-2	
-1	
-½	
0	
½	
1	
2	

6. Graph all three functions on the graph below. Identify each graph.



7. Describe the features of all three functions.

$y = x$ $y = x^3,$ $y = x^5$