

Algebra 2

Writing Assignment

Name \_\_\_\_\_

Compare and contrast the graphs of  $f(x) = \sqrt[3]{x}$  to  $f(x) = \sqrt[3]{-8+24} + 2$ .

Rewrite the parent function in exponential form:

Rewrite the equation:

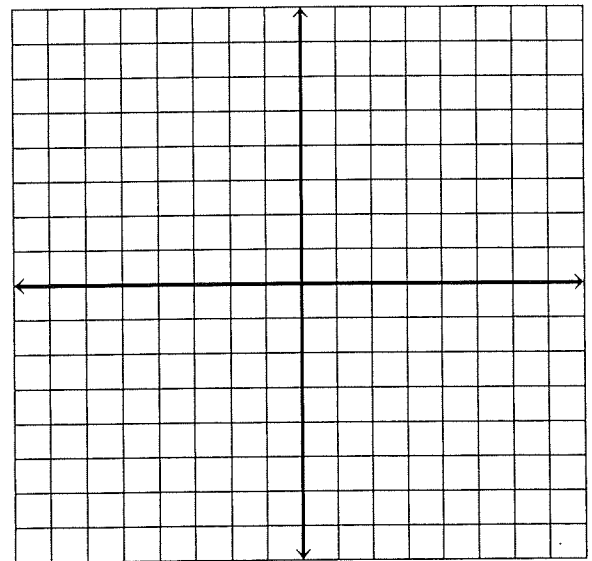
List the transformations:

List how it mathematically affects the x and y values:

- a.
- b.
- c.
- d.
- e.

- a.
- b.
- c.
- d.
- e.

Type:					
x	y				



**Directions:** I am assessing your ability to convey an understanding of mathematical concepts through writing. You will write an essay on how to graph the functions listed above. You may use a bulleted outline when you write the paper, but your essay needs to be written in paragraph form. This assignment will be graded as a quiz and will be factored into the assessment component of your course grade, which is weighted as 90% of your quarter grade.

**Topic:** How to graph a logarithmic function without using a graphing calculator. Describe all of the transformations discussed in class.

Compare and contrast the graphs of  $f(x) = \sqrt[3]{x}$  to  $f(x) = \sqrt[3]{-8+24} + 2$

## Grading:

I will show you the rubric before you begin writing, but an overview of what I'll be looking for is as follows:

- inclusion of an introduction/conclusion** (can be 1-2 sentences at the beginning and end of the paragraph)
- content-** use of vocabulary (vertical or horizontal stretch or compression, reflection over the x or y axis, Vertically up/down/left/right, etc), and clarity of explanation, discussion of each topic listed in prompt
- grammar-** spelling, complete sentences, proper punctuation, NO personal pronouns (you, I, my)
- organization-** discussion clearly flows from one topic to the next, makes use of transitional phrases

	<b>Advanced (4)</b>	<b>Proficient (3)</b>	<b>Partially Proficient (2)</b>	<b>Not Proficient (1)</b>	<b>Content Specific Requirements</b>
<b>Introduces a topic and Concludes a topic</b>	Topic is clearly identified with an engaging topic sentence/thesis/claim and effectively previews what is to come. Provides an excellent concluding statement	Topic is clearly identified with topic sentence/thesis/claim and adequately previews what is to come. Provides a clear concluding statement	Topic sentence/thesis/claim is present, but it lacks focus. A concluding statement is present but lacks focus	Topic is not obvious, and barely provides a focus. A concluding statement is not obvious and barely provides a focus	
<b>Content</b>	The response provides a comprehensive and focused understanding of the information which is strongly maintained throughout. The student uses several examples to inform the reader	The response provides an adequate understanding of the information important to the topic. The student uses examples to support the information	The response provides uneven or minimal information to support the topic. Limited use of outside sources are weakly integrated	The response provides limited or no information to support the topic. There is almost no use of sources or outside information to inform the reader	
<b>Organization</b>	The response has a clear and effective organizational structure that has a logical progression of ideas from beginning to end.	The response has an adequate organizational structure and a sense of progression from the beginning to end, though there may be minor flaws and some ideas are loosely connected	The response has an inconsistent organizational structure, an uneven progression and flaws are evident	The response has limited or no progression of organizational structure	
<b>Mechanics</b>	The response follows requirements for response and is free of errors	The response adequately meets requirements for response	The response has an inconsistent use requirements of mechanics	The response has frequent errors. Lacks command of conventions	□ domain specific vocab.
<b>Total</b>					