Learning Target 7.1

I can graph square root and cube root functions and demonstrate understanding of the significant features of its graph.

Jan 14-2:08 PM

7.1 Day 2

Cube Root Function

A function which contains a cube root of a variable.

General Form

$$y = a\sqrt[3]{x-h}+k$$

Point of Inflection

The point at which a cube root function bends.

Feb 24-9:01 AM

7.1 Day 2

Activity:
Graph the following on your graphing calculator and describe as many interesting features as you can. (Hint: Use the Graph and the Table)

$$y_1 = \sqrt[3]{x}$$

$$y_2 = \sqrt[3]{x-3}$$

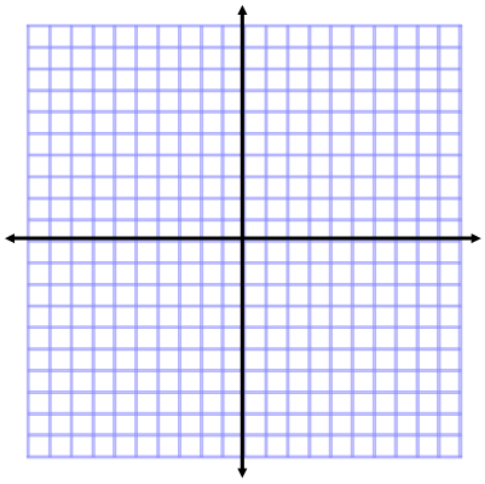
$$y_3 = \sqrt[3]{x}+3$$

Jan 14-11:03 AM

7.1 Day 2

Graph the function.

4. $y = \sqrt[3]{x-4}-2$



Increasing or Decreasing?

Domain:_____

Range:_____

Point of Inflection:_____

Jan 13-2:02 PM

7.1 Day 2

Graph the function.

5. $y = -\sqrt[3]{x+3} - 1$

(-3, -1)

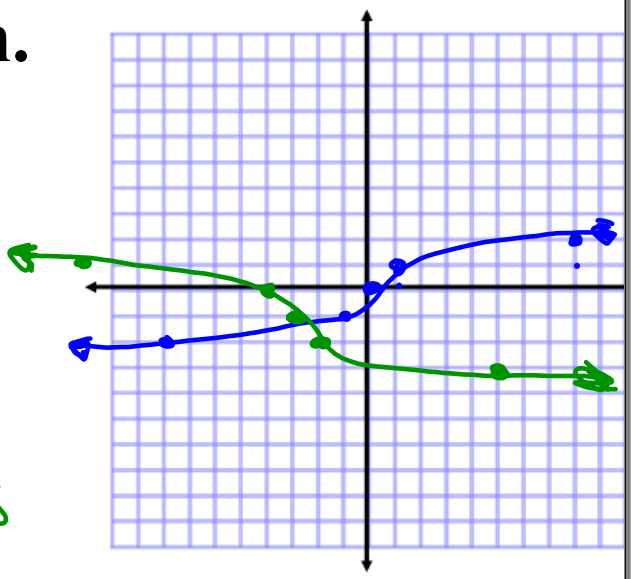
Increasing or Decreasing?

Domain: R's

Range: R's

x = -4

y = -3



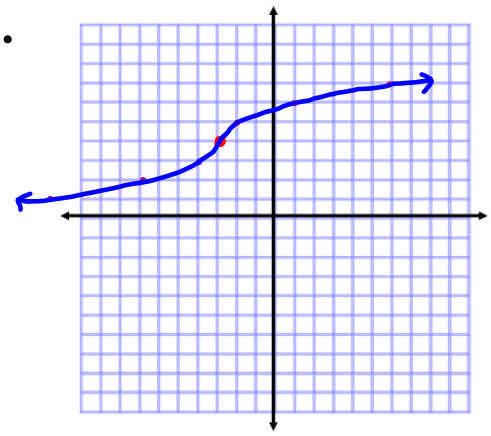
Point of Inflection:_____

Feb 24-6:49 PM

7.1 Day 2

***Use the given information to explain what the domain and range of the function are.**
***Explain your reasoning.**

3.



Increasing or Decreasing?

Domain:

Range:

Point of Inflection:

Jan 14-2:11 PM

7.1 Day 2

***Use the given information to explain what the domain and range of the function are.**
***Explain your reasoning.**

1. $y = \sqrt{x+3}+1$

Increasing or Decreasing?

Domain:

Range:

Starting Point:

Oct 7-4:11 PM

7.1 Day 2

***Use the given information to explain what the domain and range of the function are.**
***Explain your reasoning.**

2. $y = -\sqrt[3]{x} - 2$

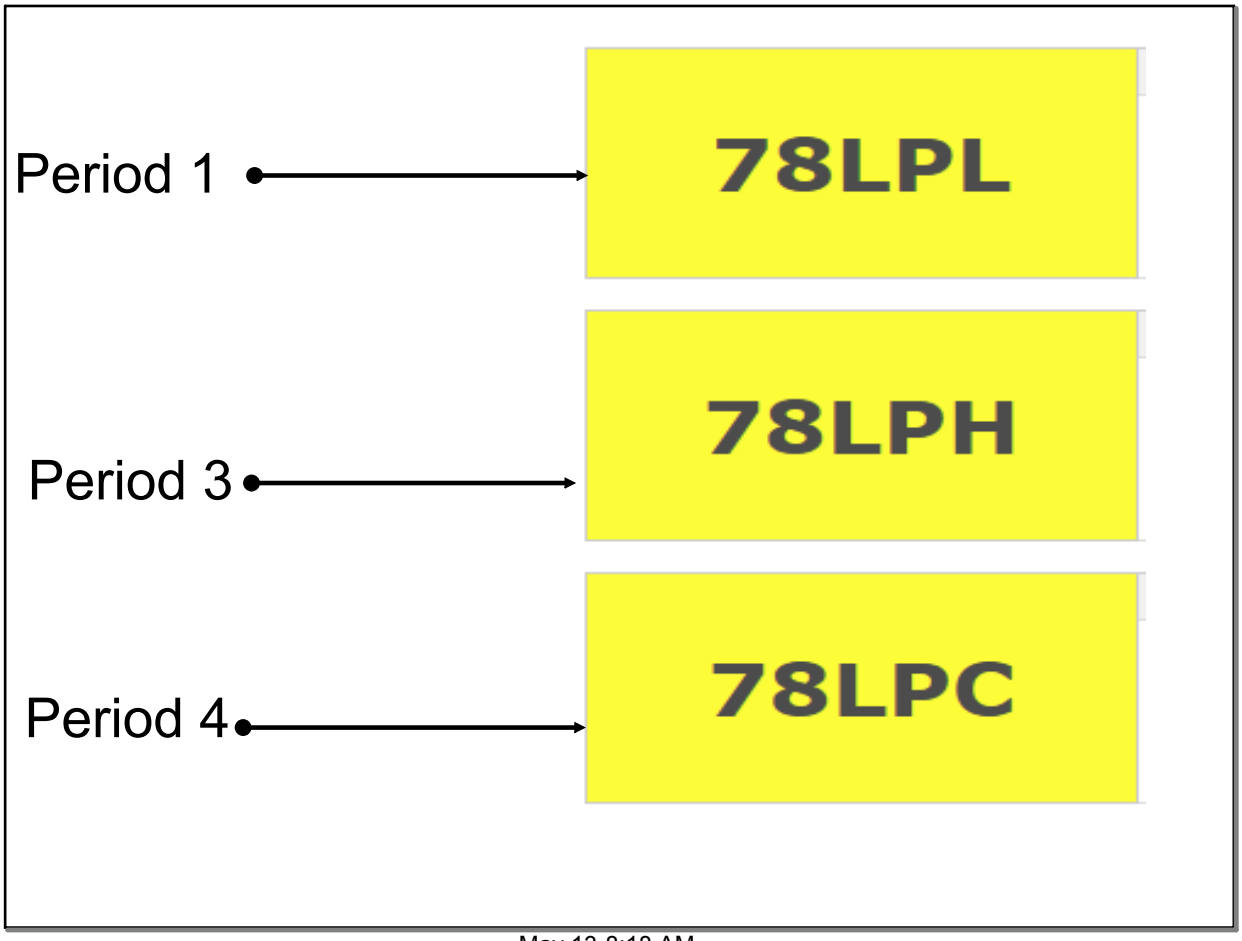
Increasing or Decreasing?

Domain:

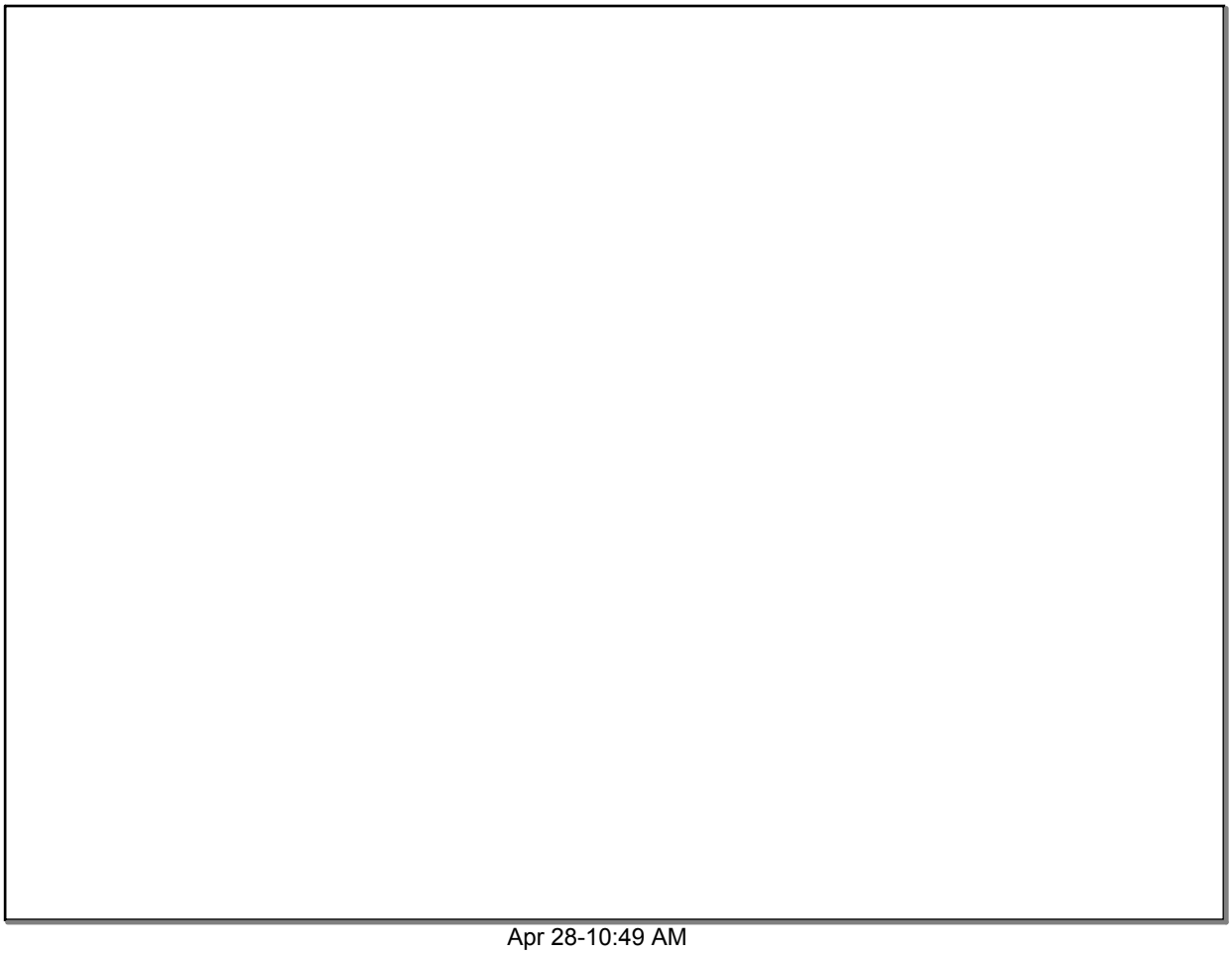
Range:

Point of Inflection:

Jan 14-2:10 PM



May 13-8:18 AM



Apr 28-10:49 AM