Intermediate Algebra B ***Name _____***

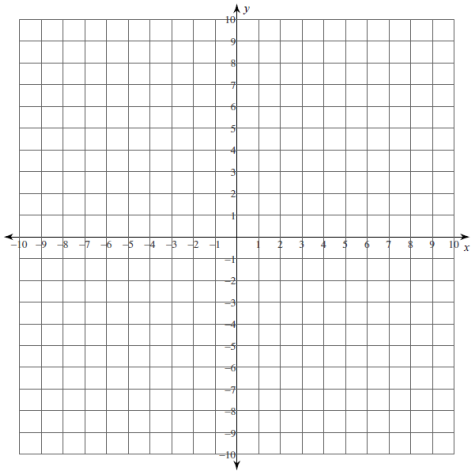
7.1 Review

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

Level 1

Graph each of the following

1. $y = \sqrt{x+3} - 4$



Increasing or Decreasing? (Circle one)

Starting Point:_____

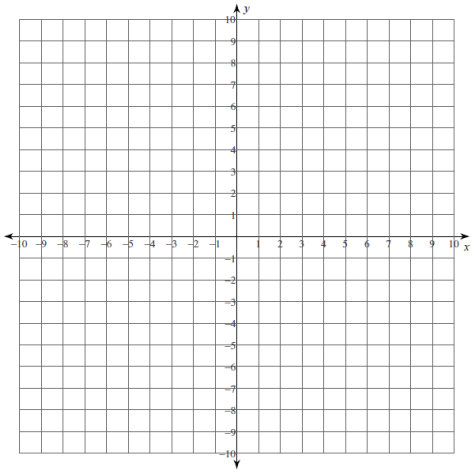
Domain:_____

Range:_____

x-intercept:_____

y-intercept:_____

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



Increasing or Decreasing? (Circle one)

Point of Inflection:_____

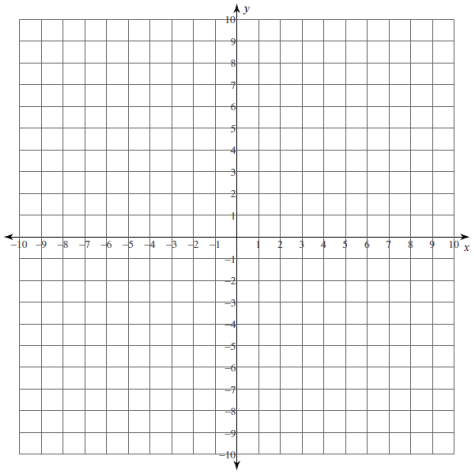
Domain:_____

Range:_____

x-intercept:_____

y-intercept:_____

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



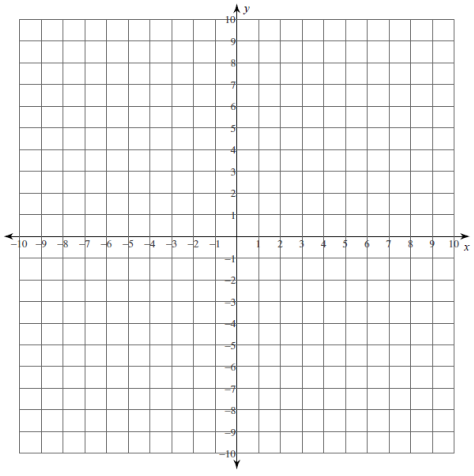
Increasing or Decreasing? (Circle one)

Point of Inflection:_____

Domain:_____

Range:_____

4. $y = -\sqrt{x} + 5$



Increasing or Decreasing? (Circle one)

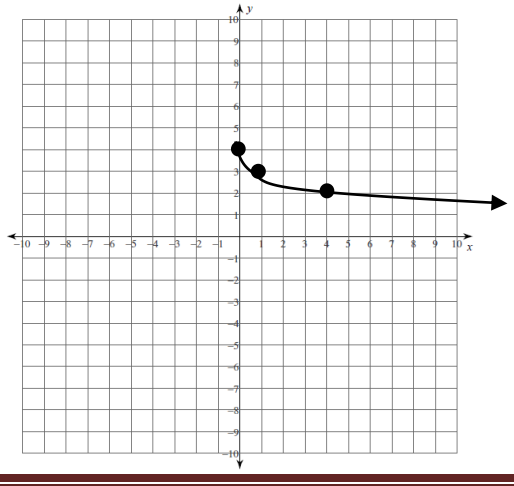
Starting Point:_____

Domain:_____

Range:_____

5. Which choice is the equation of the graph below?

a. $f(x) = -\sqrt{x} + 4$
b. $f(x) = -\sqrt{x+4}$
c. $f(x) = -\sqrt{x} - 4$
d. $f(x) = -\sqrt{x-4}$



Level 2/3

6. When given the function $f(x) = \sqrt{x-6} + 4$, Latisha says that domain $x \geq 6$ is and Rodney says the domain is $x \geq 4$. Who is correct? What could you say to help the other person understand their mistake?

7. Given the table below, write the equation for the cube root function.

Equation:_____

x	y
-5	3
2	4
3	5
4	6
11	7

8. Write the equation for a square root function that is decreasing, has been shifted to the right 3, and has been shifted down 5 from its parent function.