

Intermediate Algebra B

Name Baxter

7.1 Review

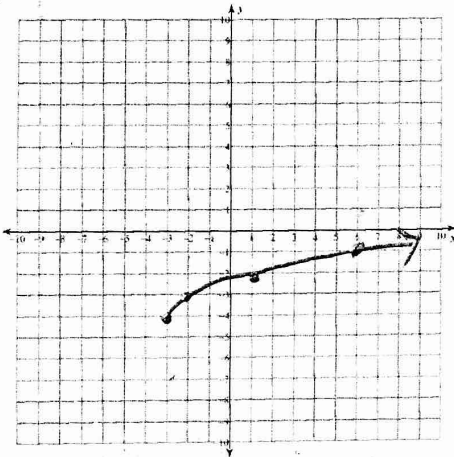
7.1 I can graph square root and cube root functions and demonstrate understanding of the significant features of its graph.

Level 1

Graph each of the following

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

x	y
-3	-4
-2	-3
1	-2
6	-1



Increasing or Decreasing? (Circle one)

Starting Point: (-3, -4)

Domain: $x \geq -3$

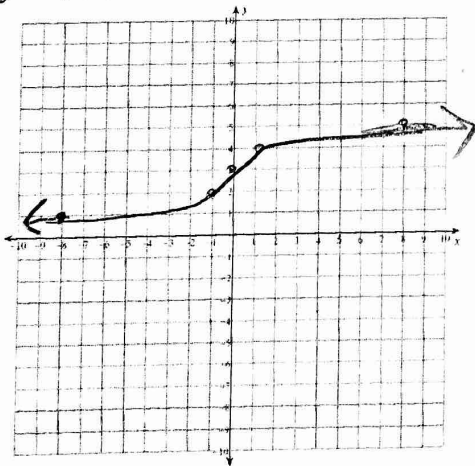
Range: $y \geq -4$

x-intercept: (13, 0)

y-intercept: $\approx (0, -2.236)$

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

x	y
-8	1
-1	2
0	3
8	4
	5



Increasing or Decreasing? (Circle one)

Point of Inflection: (0, 3)

Domain: \mathbb{R}

Range: \mathbb{R}

x-intercept: (-27, 0)

y-intercept: (0, 3)

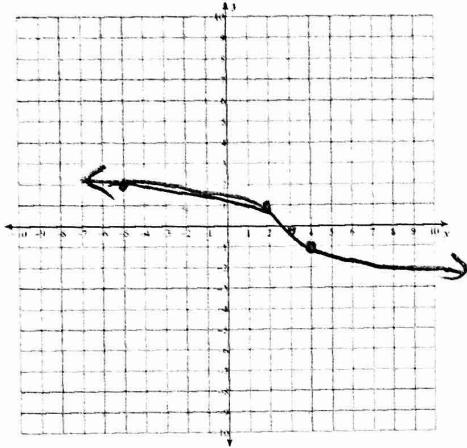
Intermediate Algebra B

Name _____

7.1 Review

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

-5	2
2	1
3	0
4	-1
11	-2



Increasing or Decreasing? (Circle one)

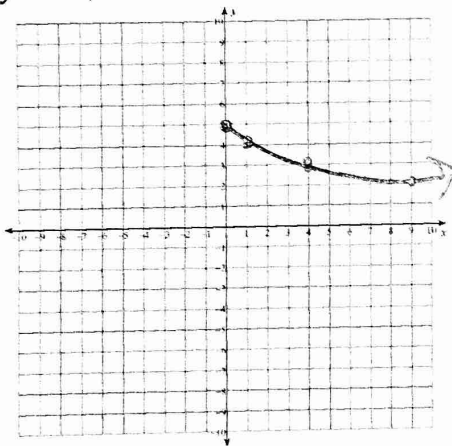
Point of Inflection: (3, 0)

Domain: \mathbb{R}

Range: \mathbb{R}

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

0	5
1	4
4	3
9	2



Increasing or Decreasing? (Circle one)

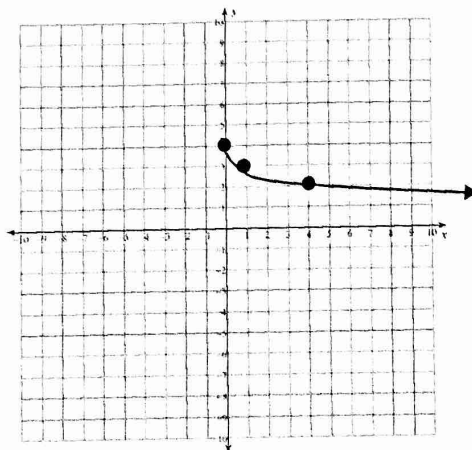
Starting Point: (0, 5)

Domain: $x \geq 0$

Range: $y \leq 5$

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. $f(x) = -\sqrt{x} - 4$



Intermediate Algebra B
Graphing Radicals

Name Baxter

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?

Latisha, Rodney is saying Range if Replace x with y

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

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

Equation: $y = \sqrt[3]{x-3} + 5$

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.

$$y = -\sqrt{x-3} - 5$$