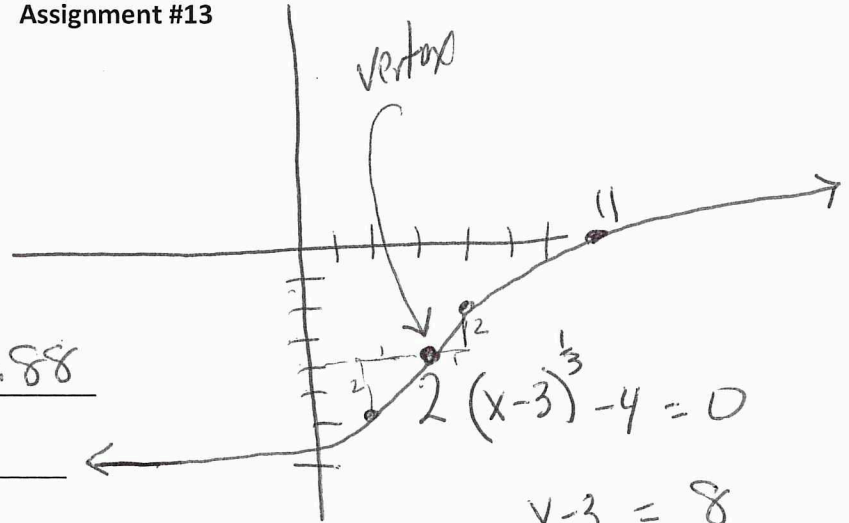


Advanced Algebra

I can analyze a graph

Assignment #13

1) Graph $y = 2\sqrt[3]{(x-3)} - 4$



a) State the y intercept -6.888

b) State the x intercept 11

c) Does this function have a maxima or minima? If so identify them

No continuous

c) Using proper math terminology what is the domain?

All Real #'s

d) Using Proper math terminology what is the range?

$y \geq -4$

e) For what x values is f(x) increasing?

ALWAYS

g) For what x values is f(x) decreasing?

Never

2) Draw the graph $y = \sqrt[2]{(x+3)} - 6$



a) State the y intercept -4.27

b) State the x intercept 33

c) Does this function have a maxima or minima? If so identify them

min (-3, -6)

$$(x+3)^{\frac{1}{2}} - 6 = 0$$

$$x+3 = 36$$

$$x = 33$$

d) Using proper math terminology what is the domain?

~~All real~~ $x \geq -3$

e) Using Proper math terminology what is the range?

$y \geq -6$

f) For what x values is f(x) increasing?

Always

g) For what x values is f(x) decreasing?

Never

What is true about the rate of change for the function shown to the right when $-3 < x < 0$?

Positive

At decreasing Rate

The slopes are getting smaller