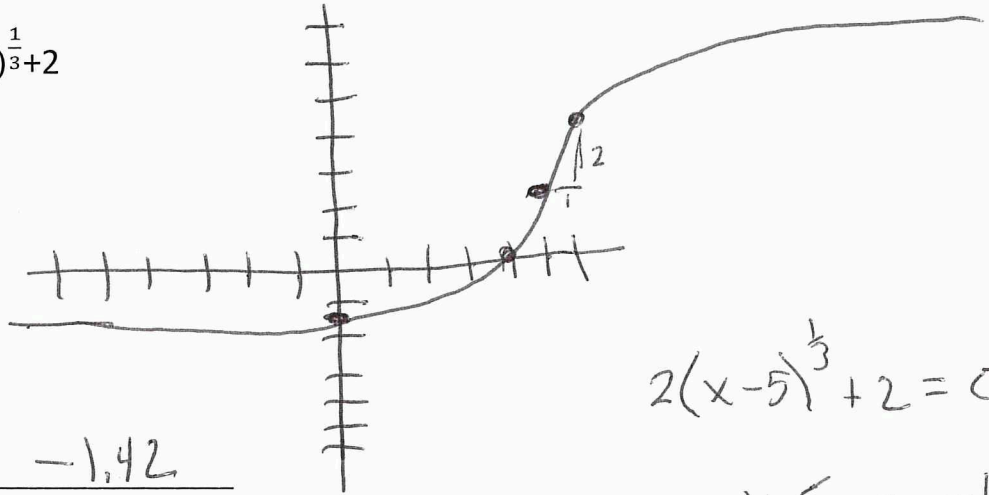


Advanced Algebra

I can analyze a graph #1

Assignment #10

1) Graph $y = 2(x - 5)^{\frac{1}{3}} + 2$



$$2(x-5)^{\frac{1}{3}} + 2 = 0$$

$$x-5 = -1$$

$$x = 4$$

a) State the y intercept -1.42

b) State the x intercept 4

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

NO continuous function

d) Using proper math terminology what is the domain?

All Real #'s

e) Using Proper math terminology what is the range?

All Real #'s

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

Always increasing

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

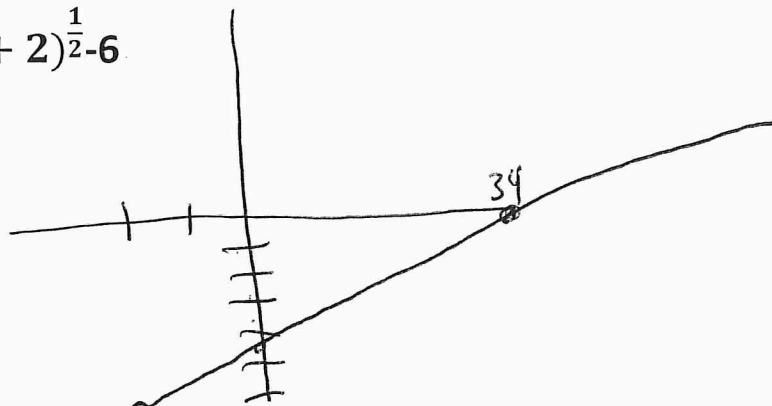
Never

j) What is f(2)

VAR(2)

-0.884

2) Draw the graph $y = (x + 2)^{\frac{1}{2}} - 6$.



a) State the y intercept -4.59

b) State the x intercept 34

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

min $(-2, -6)$

d) Using proper math terminology what is the domain?

$$x \geq -2$$

e) Using Proper math terminology what is the range?

$$y > -6$$

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

Always

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

never

j) What is $f(2)$

$$\textcircled{-4}$$

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

$$x+2 = 36$$

$$x = 34$$