

Analyze the Graph

Is it a function? YES; passes vert line test

Is it a one-to-one function? NO; fails horiz. line test

What is the domain? $(-\infty, 5]$

What is the range? $(-\infty, 4]$

Name any relative maxs. $(0, 2)$

Name any relative mins. $(3, -1)$

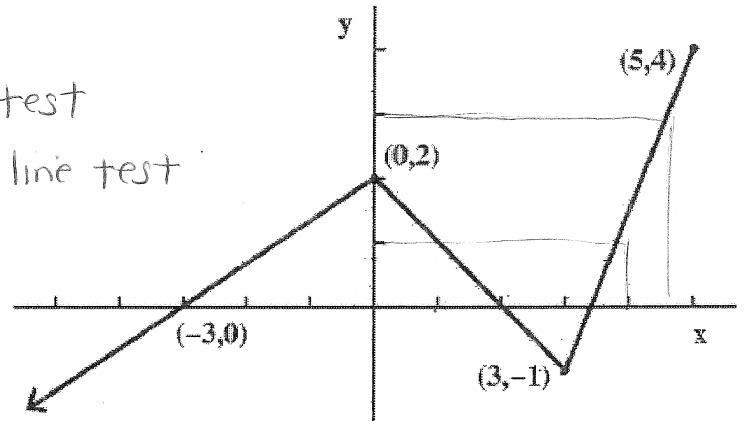
Where is the graph increasing/decreasing?

I: $(-\infty, 0) \cup (3, 5)$ D: $(0, 3)$

What are the zeros? $(-3, 0)$, $(2, 0)$, & $(3.4, 0)$

Where is $f(x) \geq 0$? $[-3, 2] \cup [3.4, 5]$

Where is $f(x) < 0$? $(-\infty, -3) \cup (2, 3.4)$



$$f(2) = 0$$

$$f(4) = 1$$

$$\text{When } f(x) = 3, x = 4.5$$

$$3f(0) - f(5) =$$

$$3(2) - 4 = 2$$

Use a graphing calculator to answer the questions below.

Given the equation $f(x) = 2x^3 - 6x^2 + 3x + 1$ find the following:

What are the zeros?

$$x = -.225, 1.277, 2.553$$

Name any relative maxs. $(.293, 1.414)$

Name any relative mins. $(1.707, -1.414)$

Where is $f(x) < 0$? $(-\infty, -.225) \cup (1.277, 2.553)$ Where is the graph increasing/decreasing?

$$I: (-\infty, .293) \cup (1.707, \infty)$$

$$D: (.293, 1.707)$$

Where is $f(x) \geq 0$?

$$[-.225, 1.277] \cup [2.553, \infty)$$

