

Calc Quiz 6
Fall 2024, © A. Azzolino

Do not print/submit this page.

Do:

1. Rename each page of your test with:

##.First.Last.Q6.page __

NO TITLE, NO CREDIT FOR ANY WORK/ANSWER ON THAT PAGE!!!

2. Rename the file(s) with ##.First.Last.Q6

3. Attach page(s) in email to:

blue@mathnstuff.com or

purple@mathnstuff.com

4. Submit by the announced time.

This is a unique quiz. Page 1 counts as a 2 point quiz.

Page 2 is an extra credit 2 point quiz for those who choose to work and learn a bit more than what is required.

Submit both by Friday night.

Work for a perfect paper. There is partial credit on page 1. Stay safe. – a²

Q6.m131fa24

Title: _____

In blank boxes, write the best answer or answers for the described situation. The point (4,0) is an example.

point (x, f(x))	f'(c)	f''(c)	the point is called a(n)	the x is called a ... or doing what	the y is called a ... or doing what	the function is doing what
(4, 0)			x-intercept	zero	nothing special	crossing x-axis
	0	-5				
	0	3				
	not defined					
	0	0				
(c, f(c))	can't tell	can't tell				
(-2, 5)	1					
(-2, 5)	1	-3				
(-2, 5)	-3	-4				

Some possible answers:

(c, f(c))	critical value	increasing	positive
an inflection point	decreasing	infinite	relative maximum
can't tell	discontinuity	inflection point	relative minimum
concave down	endpoint	negative	the tangent is 0
concave up	extreme value	neither concave up or concave down	undefined
critical number	extreme value	not changing	x-intercept
critical point	horizontal tangent	nothing special	y-intercept
			zero

1. ##.First.Lastname.Q6.pg2_____

2. Write ##.... . Q6 on each page and a page number

M29 Q6 © Fa24, A.2

3. State your email address. _____

4. Initial the document indicating no one has helped you and you have helped no one. _____

5. List each web page or textbook page you used to complete this work.

Start with point (0,0) and move as directed by the derivatives. Sketch the curve.

No, there is no scale on the y-axis. Use as pencil to experiment.

x	-2	-1.5	-1	-0.5	0	0.5	1	2	2	2.5	3	3.5	4	4.5	5
f(x)															
f'(x)	-135	-18	-900,000	24	0	-0.2	1	1	0.5	0	-1.2	-1	1.2	6	13
f''(x)	157	450	66	-158	-7	2.5	1.4	-1	-1.8	-2	-0.6	2	6	12	19

