CENGAGE | WEBASSIGN

raguilar2@student.sierracollege.edu
(sign out)

Quiz #1 (2.1-2.3) (Quiz)

INSTRUCTOR
Charles Buchwald
Sierra College, CA

Current Score

QUESTION	1	2	3	4	5	6	7
POINTS	1/1 ✓	2/2 ✓	1/1 ✓	1/2 ✓✗	0/1 ✗	5/6 ✓✗	1/1 ✓

TOTAL SCORE

11/14 | 78.6%

Due Date

FRI, AUG 28, 2020
11:59 PM PDT

Request Extension

Assignment Submission & Scoring

Assignment Submission

For this assignment, you submit answers by question parts. The number of submissions remaining for each question part only changes if you submit or change the answer.

Assignment Scoring

Your last submission is used for your score.

---

1. [1/1 Points] DETAILS PREVIOUS ANSWERS **SCALCET8 2.3.064.**

MY NOTES ASK YOUR TEACHER

Evaluate $\lim_{x \to 3} \frac{\sqrt{7 - x} - 2}{\sqrt{19 - x} - 4}$.

2 ✔

---

2. [2/2 Points] DETAILS PREVIOUS ANSWERS **SCALCET8 2.3.065.**

MY NOTES ASK YOUR TEACHER

Find the number a such that the limit exists.

$$\lim_{x \to -2} \frac{3x^2 + ax + a + 9}{x^2 + x - 2}$$

$a =$ 21 ✔

Find the value of the limit.

-3 ✔

---

3. [1/1 Points] DETAILS PREVIOUS ANSWERS **SCALCET8 2.3.005.**

MY NOTES ASK YOUR TEACHER

Evaluate the limit using the appropriate Limit Law(s). (If an answer does not exist, enter DNE.)

$$\lim_{t \to -2} \frac{t^4 - 4}{2t^2 - 3t + 6}$$

3/5 ✔

4. **[1/2 Points]** DETAILS PREVIOUS ANSWERS **SCALCET8 2.3.010.**

MY NOTES ASK YOUR TEACHER

(a) What is wrong with the following equation?

$$\frac{x^2 + x - 6}{x - 2} = x + 3$$

- $(x - 2)(x + 3) \neq x^2 + x - 6$
- The left-hand side is not defined for $x = 0$, but the right-hand side is.
- The left-hand side is not defined for $x = 2$, but the right-hand side is.
- (●) None of these — the equation is correct. ✗

(b) In view of part (a), explain why the equation

$$\lim_{x \to 2} \frac{x^2 + x - 6}{x - 2} = \lim_{x \to 2} (x + 3)$$

is correct.

- Since $\frac{x^2 + x - 6}{x - 2}$ and $x + 3$ are both continuous, the equation follows.
- (●) Since the equation holds for all $x \neq 2$, it follows that both sides of the equation approach the same limit as $x \to 2$.
- This equation follows from the fact that the equation in part (a) is correct.
- None of these — the equation is not correct. ✓

5. **[0/1 Points]** DETAILS PREVIOUS ANSWERS **SCALCET8 2.3.029.**

MY NOTES ASK YOUR TEACHER

Question Details

QUESTION PARTS	1	TOTAL
POINTS	0/1 ✗	0/1
SUBMISSIONS USED	1/1	

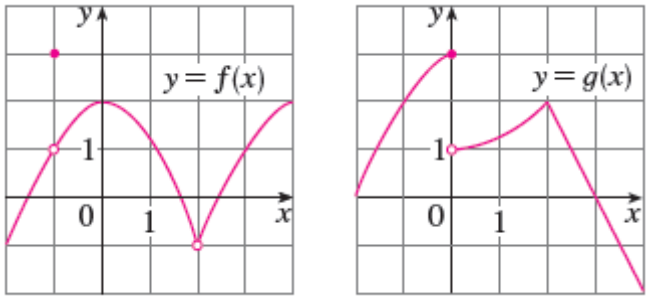
$$\lim_{t \to 0} \left(\frac{3}{t\sqrt{1+t}} - \frac{3}{t} \right)$$

1 -1/6 ✗

6. **[5/6 Points]** DETAILS PREVIOUS ANSWERS **SCALCET8 2.3.002.**

MY NOTES ASK YOUR TEACHER

The graphs of f and g are given. Use them to evaluate each limit, if it exists. (If an answer does not exist, enter DNE.)



(a) $\lim_{x \to 2} [f(x) + g(x)]$

1 ✔

(b) $\lim_{x \to 0} [f(x) - g(x)]$

DNE ✔

(c) $\lim_{x \to -1} [f(x)g(x)]$

2 ✔

(d) $\lim_{x \to 3} \frac{f(x)}{g(x)}$

DNE ✔

(e) $\lim_{x \to 2} [x^2 f(x)]$

-4 ✔

(f) $f(-1) + \lim_{x \to -1} g(x)$

DNE ✘

7. **[1/1 Points]** DETAILS PREVIOUS ANSWERS **SCALCET8 2.3.043.**

MY NOTES ASK YOUR TEACHER

Find the limit, if it exists. (If an answer does not exist, enter DNE.)

$$\lim_{x \to 0.2^-} \frac{5x - 1}{|5x^3 - x^2|}$$

$$-25

You have no submissions remaining on this assignment

Home My Assignments Request Extension