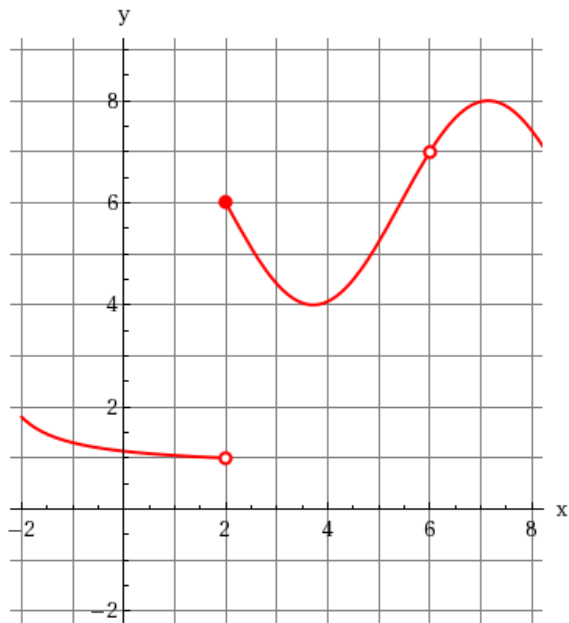


Due: Wed Sep 10 2014 11:59 PM EDT

Question	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
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This question has several parts that must be completed sequentially. If you skip a part of the question, you will not receive any points for the skipped part, and you will not be able to come back to the skipped part.

Use the given graph of  $f$  to state the value of each quantity, if it exists.



Part (a)

$$\lim_{x \rightarrow 2^-} f(x)$$

Part (b)

$$\lim_{x \rightarrow 2^+} f(x)$$

Part (c)

$$\lim_{x \rightarrow 2} f(x)$$

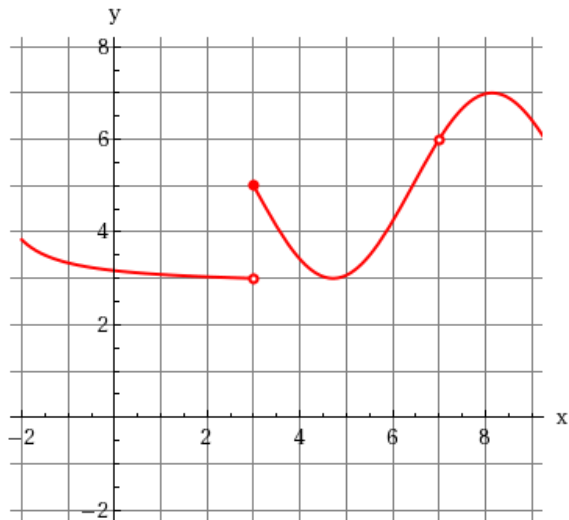
Part (d)

$$\lim_{x \rightarrow 6} f(x)$$

Part (e)

$$f(6)$$


Use the given graph of  $f$  to state the value of each quantity, if it exists. (If it does not exist, enter NONE.)




(a)  $\lim_{x \rightarrow 3^-} f(x)$

  3


(b)  $\lim_{x \rightarrow 3^+} f(x)$

  5


(c)  $\lim_{x \rightarrow 3} f(x)$

  NONE

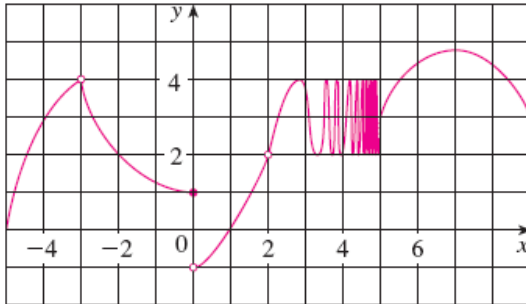
(d)  $\lim_{x \rightarrow 7} f(x)$

  6

(e)  $f(7)$

  NONE

For the function  $h$  whose graph is given, state the value of each quantity, if it exists. (If it does not exist, enter NONE.)



(a)  $\lim_{x \rightarrow -3^-} h(x)$

4

(b)  $\lim_{x \rightarrow -3^+} h(x)$

4

(c)  $\lim_{x \rightarrow -3} h(x)$

4

(d)  $h(-3)$

NONE

(e)  $\lim_{x \rightarrow 0^-} h(x)$

1

(f)  $\lim_{x \rightarrow 0^+} h(x)$

-1

(g)  $\lim_{x \rightarrow 0} h(x)$

NONE

(h)  $h(0)$

1

(i)  $\lim_{x \rightarrow 2^-} h(x)$

2

(j)  $h(2)$

NONE

(k)  $\lim_{x \rightarrow 5^+} h(x)$

3

(l)  $\lim_{x \rightarrow 5^-} h(x)$

NONE

This question has several parts that must be completed sequentially. If you skip a part of the question, you will not receive any points for the skipped part, and you will not be able to come back to the skipped part.

#### Tutorial Exercise

Determine the infinite limit.

$$\lim_{x \rightarrow -7^-} \frac{x+8}{x+7}$$

Determine the infinite limit.

$$\lim_{x \rightarrow -8^-} \frac{x+9}{x+8}$$

☐  $\infty$


☒  $-\infty$

6. Question Details

SCalcET6 2.2.025. [1816599]

Determine the infinite limit.

$$\lim_{x \rightarrow -7^+} \frac{x+8}{x+7}$$


- ☐   $\infty$
- ☐  $-\infty$

7. Question Details

SCalcET6 2.2.027. [1816778]

Determine the infinite limit.

$$\lim_{x \rightarrow 5} \frac{6-x}{(x-5)^2}$$


- ☐   $\infty$
- ☐  $-\infty$

8. Question Details

SCalcET6 2.2.028. [1817244]

Determine the infinite limit.

$$\lim_{x \rightarrow 3^+} \frac{e^x}{(x-3)^3}$$


- ☐   $\infty$
- ☐  $-\infty$

9. Question Details

SCalcET6 2.2.032. [679801]

Determine the infinite limit.

$$\lim_{x \rightarrow 4^+} \frac{x^2 - 4x}{x^2 - 8x + 16}$$


- ☐   $\infty$
- ☐  $-\infty$

10. Question Details

SCalcET6 2.3.003. [679800]

Evaluate the limit using the appropriate Limit Law(s). (If it does not exist, enter NONE.)

$$\lim_{x \rightarrow 1} (2x^4 + 4x^2 - x + 5)$$


 10

11. Question Details

SCalcET6 2.3.004. [1816114]

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

$$\lim_{x \rightarrow 1} \frac{2x^2 + 3}{x^2 + 4x - 3}$$


  5/2

12. Question Details

SCalcET6 2.3.005. [1816054]

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

$$\lim_{x \rightarrow 8} \left( 3 + \sqrt[3]{x} \right) (1 - 6x^2 + x^3)$$


  645

13. Question Details

SCalcET6 2.3.006. [1817400]

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

$$\lim_{t \rightarrow -1} (t^2 + 1)^2 (t + 3)^5$$


  128

14. Question Details

SCalcET6 2.3.007. [1817152]

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

$$\lim_{x \rightarrow 1} \left( \frac{1 + 3x}{1 + 5x^2 + 2x^4} \right)^3$$


  1/8

15. Question Details

SCalcET6 2.3.008. [1816398]

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

$$\lim_{u \rightarrow -4} \sqrt{u^4 + 2u + 8}$$


  16

16. Question Details

SCalcET6 2.3.009. [1816147]

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

$$\lim_{x \rightarrow 1^-} \sqrt{1 - x^2}$$


  0

17. Question Details

SCalcET6 2.3.011. [679856]

Evaluate the limit, if it exists. (If it does not exist, enter NONE).

$$\lim_{x \rightarrow 2} \frac{x^2 + x - 6}{x - 2}$$


  5

18. Question Details

SCalcET6 2.3.012. [1817506]

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

$$\lim_{x \rightarrow -6} \frac{x^2 + 7x + 6}{x^2 + 5x - 6}$$

19. Question Details


SCalcET6 2.3.014.MI.SA. [1569656]

*This question has several parts that must be completed sequentially. If you skip a part of the question, you will not receive any points for the skipped part, and you will not be able to come back to the skipped part.*

**Tutorial Exercise**

Evaluate the limit, if it exists. (If it does not exist, enter NONE).

$$\lim_{x \rightarrow 12} \frac{x^2 - 12x}{x^2 - 11x - 12}$$


 

20. Question Details

SCalcET6 2.3.014.MI. [1817190]

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

$$\lim_{x \rightarrow 5} \frac{x^2 - 5x}{x^2 - 4x - 5}$$


 

21. Question Details

SCalcET6 2.3.013. [679741]

Evaluate the limit, if it exists. (If it does not exist, enter NONE).

$$\lim_{x \rightarrow 1} \frac{x^2 - x + 2}{x - 1}$$


 

22. Question Details

SCalcET6 2.3.015. [1817479]

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

$$\lim_{t \rightarrow -9} \frac{t^2 - 81}{2t^2 + 19t + 9}$$


 

23. Question Details

SCalcET6 2.3.016. [657087]

Evaluate the limit, if it exists. (If it does not exist, enter NONE.)

$$\lim_{x \rightarrow -1} \frac{x^2 - 9x}{x^2 - 8x - 9}$$


 

24. Question Details

SCalcET6 2.3.017. [679718]

Evaluate the limit, if it exists. (If it does not exist, enter NONE).

$$\lim_{h \rightarrow 0} \frac{(1+h)^2 - 1}{h}$$


  2

25. Question Details

SCalcET6 2.3.021. [1816571]

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

$$\lim_{t \rightarrow 4} \frac{4 - t}{2 - \sqrt{t}}$$


  4

26. Question Details

SCalcET6 2.3.022. [1359823]

Evaluate the limit, if it exists. (If it does not exist, enter NONE.)

$$\lim_{h \rightarrow 0} \frac{\sqrt{1+h} - 1}{h}$$


  1/2

27. Question Details

SCalcET6 2.3.023. [679804]

Evaluate the limit, if it exists. (If it does not exist, enter NONE.)

$$\lim_{x \rightarrow 22} \frac{\sqrt{x+3} - 5}{x - 22}$$


  1/10

28. Question Details

SCalcET6 2.3.027. [1816772]

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

$$\lim_{x \rightarrow 9} \frac{3 - \sqrt{x}}{9x - x^2}$$


  1/54

29. Question Details

SCalcET6 2.3.030. [1816542]

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

$$\lim_{x \rightarrow -4} \frac{\sqrt{x^2 + 9} - 5}{x + 4}$$

  -4/5

## Assignment Details

Name (AID): MATH 141 HW 03 (6284394)

Submissions Allowed: 100

Category: Homework

Code:

Locked: Yes

Author: Blanco-Silva, Francisco ( blanco@math.sc.edu )

Last Saved: Sep 5, 2014 10:30 PM EDT

## Feedback Settings

Before due date

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Assignment Score

Publish Essay Scores

Question Part Score

Mark



Permission: **Protected**  
Randomization: **Person**  
Which graded: **Last**

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- Publish Essay Scores
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- Mark
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- Help/Hints
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