

MATH 161 REALITY CHECK 9 NAME: \_\_\_\_\_

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[ Run: 01/22/2016 at 22:10 Seed: 6477. Order of Checkable Items: List.]

**Response Grid** (Check the appropriate boxes thus: )

Question	a	b	c	d	e
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					

After having read the chapter pencil in hand and done this REALITY CHECK ,

i. What would you say the idea of the chapter is:

ii. What questions do you have:

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MATH 161 REALITY CHECK 9 NAME: \_\_\_\_\_

*Rck 9-1.* Let  $f$  be the function specified by the global input-output rule

$$x \xrightarrow{f} f(x) = +11x - 12$$

find the local input-output rule of  $f$  near  $\infty$ .

**Your Work:**

i. You must make your case for whatever statement you are making.


ii. Circle which of the following choices corresponds to your result.

a.  $x \xrightarrow{f} f(x) = +11 + [\dots]$

b.  $x \xrightarrow{f} f(x) = +11x$

c.  $x \xrightarrow{f} f(x) = +11x + [\dots]$

d.  $x \xrightarrow{f} f(x) = -12 + [\dots]$

e. None of the preceding

iii. Check the corresponding box in the **Response Grid** on the front page thus: .

*Rck 9-2.* Let  $f$  be the function specified by the global input-output rule

$$x \xrightarrow{f} f(x) = -13.98x + 62.41$$

find the local graph of  $f$  near  $\infty$ .

**Your Work:**

i. You must make your case for whatever statement you are making.

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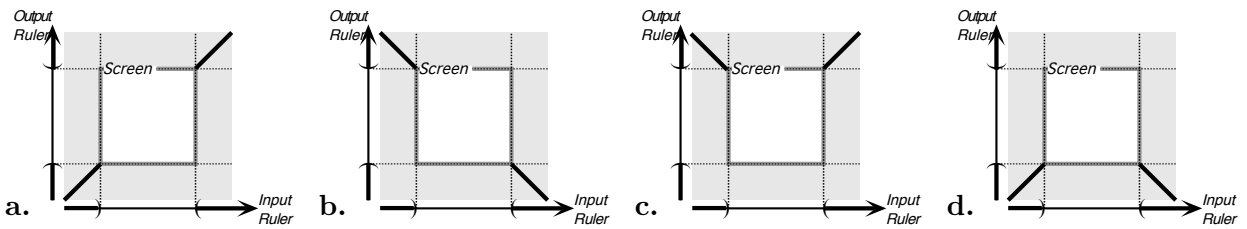


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ii. Circle which of the following choices corresponds to your result.



e. None of the preceding

iii. Check the corresponding box in the **Response Grid** on the front page thus: .

*Rck 9-3.* Let  $f$  be the function specified by the global input-output rule

$$x \xrightarrow{f} f(x) = -7x - 6$$

what is Height-sign  $f|_{\text{near } \infty}$

**Your Work:**

i. You must make your case for whatever statement you are making.

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ii. Circle which of the following choices corresponds to your result.

- a. Height-sign  $f|_{\text{near } \infty} = (+, +)$                       b. Height-sign  $f|_{\text{near } \infty} = (+, -)$   
 c. Height-sign  $f|_{\text{near } \infty} = (-, +)$                       d. Height-sign  $f|_{\text{near } \infty} = (-, -)$   
 e. None of the preceding

iii. Check the corresponding box in the **Response Grid** on the front page thus: .

*Rck 9-4.* Let  $f$  be the function specified by the global input-output rule

$$x \xrightarrow{f} f(x) = -2x + 10$$

What is Slope-sign  $f|_{\text{near } \infty}$

**Your Work:**

i. You must make your case for whatever statement you are making.

ii. Circle which of the following choices corresponds to your result.

- a. Slope-sign  $f|_{\text{near } \infty} = (\swarrow, \swarrow)$                       b. Slope-sign  $f|_{\text{near } \infty} = (\swarrow, \searrow)$   
 c. Slope-sign  $f|_{\text{near } \infty} = (\searrow, \swarrow)$                       d. Slope-sign  $f|_{\text{near } \infty} = (\searrow, \searrow)$   
 e. None of the preceding

iii. Check the corresponding box in the **Response Grid** on the front page thus: .

*Rck 9-5.* Let  $f$  be the function specified by the global input-output rule

$$x \xrightarrow{f} f(x) = -3x + 6$$

What is the local rule of  $f$  near  $-4$ .

**Your Work:**

i. You must make your case for whatever statement you are making.


ii. Circle which of the following choices corresponds to your result.

a.  $h \xrightarrow{f^{-4}} f_{-4}(h) = +18$

b.  $h \xrightarrow{f^{-4}} f_{-4}(h) = +18 - 3h$

c.  $h \xrightarrow{f^{-4}} f_{-4}(h) = -3h + 18$

d.  $h \xrightarrow{f^{-4}} f_{-4}(h) = -3h$

e. None of the preceding

iii. Check the corresponding box in the **Response Grid** on the front page thus: .

*Rck 9-6.* Let  $f$  be the function specified by the global input-output rule

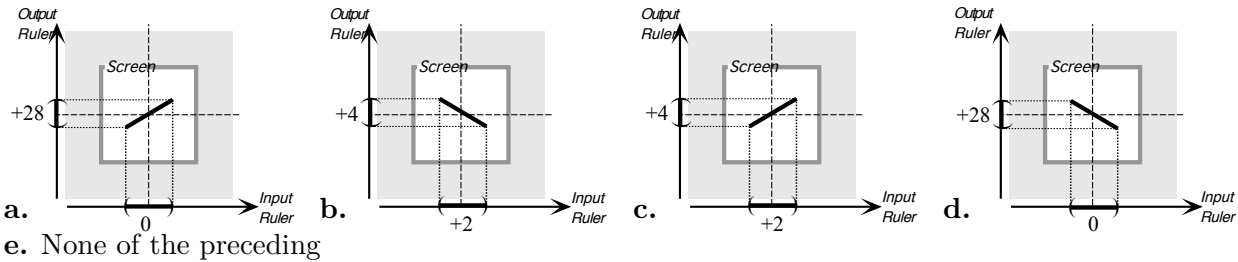
$$x \xrightarrow{f} f(x) = +12x + 4$$

What is Local graph  $f|_{\text{near } +2}$

**Your Work:**

i. You must make your case for whatever statement you are making.


ii. Circle which of the following choices corresponds to your result.



iii. Check the corresponding box in the **Response Grid** on the front page thus: .

*Rck 9-7.* Let  $f$  be the function specified by the global input-output rule

$$x \xrightarrow{f} f(x) = -3x + 12$$

What is Height-sign  $f|_{\text{near } -3}$

**Your Work:**

i. You must make your case for whatever statement you are making.

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ii. Circle which of the following choices corresponds to your result.

a. Height-sign  $f|_{\text{near } -3} = (+, +)$

b. Height-sign  $f|_{\text{near } -3} = (+, -)$

c. Height-sign  $f|_{\text{near } -3} = (-, +)$

d. Height-sign  $f|_{\text{near } -3} = (-, -)$

e. None of the preceding

iii. Check the corresponding box in the **Response Grid** on the front page thus: .

*Rck 9-8.* Let  $f$  be the function specified by the global input-output rule

$$x \xrightarrow{f} f(x) = -2x + 10$$

What is Slope-sign  $f|_{\text{near } +3}$

**Your Work:**

i. You must make your case for whatever statement you are making.


ii. Circle which of the following choices corresponds to your result.

a. Slope-sign  $f|_{\text{near } +3} = (\swarrow, \swarrow)$

b. Slope-sign  $f|_{\text{near } +3} = (\swarrow, \searrow)$

c. Slope-sign  $f|_{\text{near } +3} = (\searrow, \swarrow)$

d. Slope-sign  $f|_{\text{near } +3} = (\searrow, \searrow)$

e. None of the preceding

iii. Check the corresponding box in the **Response Grid** on the front page thus: .

*Rck 9-9.* Let  $f$  be the function specified by the global input-output rule

$$x \xrightarrow{f} f(x) = +5x - 35$$

Find the local input-output rule for inputs near  $+7$ .

**Your Work:**

i. You must make your case for whatever statement you are making.


ii. Circle which of the following choices corresponds to your result.



a.  $h \xrightarrow{f} f(h) = +5h$

b.  $-35 + 5h$

c.  $x \xrightarrow{f} f(x) = -35$

d.  $h \xrightarrow{f^{-4}} f_{-4}(h) = +5h$

e. None of the preceding

iii. Check the corresponding box in the **Response Grid** on the front page thus: .

*Rck 9-10.* Let  $f$  be the function specified by the global input-output rule

$$x \xrightarrow{f} f(x) = -3x + 6$$

what is Local graph  $f|_{\text{near } +2}$

**Your Work:**

i. You must make your case for whatever statement you are making.

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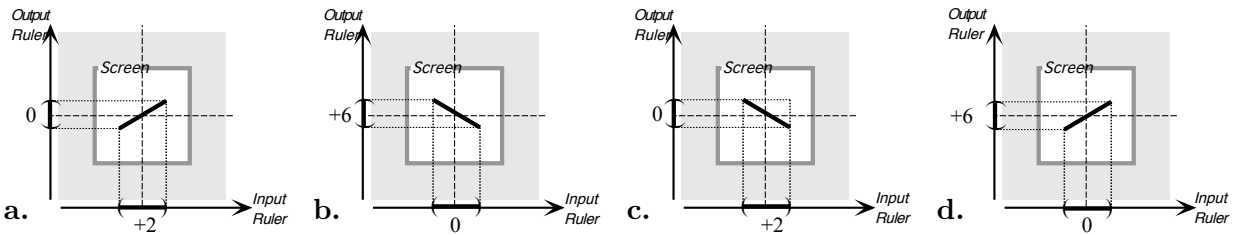


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ii. Circle which of the following choices corresponds to your result.



e. None of the preceding

iii. Check the corresponding box in the **Response Grid** on the front page thus: .

*Rck 9-11.* Let  $f$  be the function specified by the global input-output rule

$$x \xrightarrow{f} f(x) = -3x + 15$$

Find Slope-sign of  $f$  near  $x_0 = +5$

**Your Work:**

i. You must make your case for whatever statement you are making.


ii. Circle which of the following choices corresponds to your result.

- a. ( $\swarrow, \swarrow$ )      b. ( $\swarrow, \searrow$ )      c. ( $\searrow, \swarrow$ )      d. ( $\searrow, \searrow$ )  
e. None of the preceding

iii. Check the corresponding box in the **Response Grid** on the front page thus: .