

Unit 2: DOMAIN Assessment

Name _____ PER _____ DATE _____

2A	2B	2D	2F

Computation

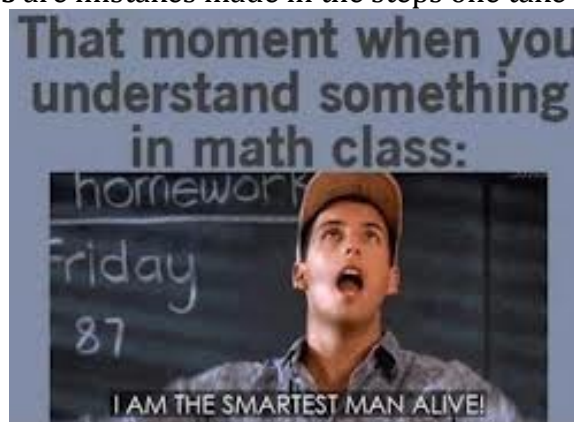
4	3	2	1
Response has no recall errors, <i>minimal</i> procedural errors* and no conceptual errors**	Response has no recall errors, minimal procedural errors and <i>minimal</i> conceptual errors	Response has no recall errors, but has several procedural errors <u>OR</u> several conceptual errors	Recall errors exist <u>OR</u> Steps taken are not related to problem <u>OR</u> Response left blank

Written Responses

4	3	2	1
Response is written in a complete sentence and uses appropriate academic vocab	Response is written in a complete sentence, and minimal errors exist in use of academic vocab	Response is not written in a complete sentence <u>OR</u> no academic vocab	Concept of response is not related to problem <u>OR</u> Response is left blank

*Procedural errors are mistakes made in the math

**Conceptual errors are mistakes made in the steps one take

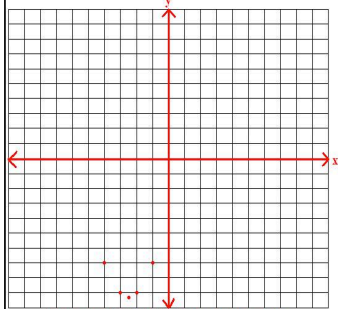


BOX YOUR ANSWERS!!!

SCORES	LT 2A																
<p>Your predicted score:</p> <hr/>	<p>1. Indicate whether each relation is a function. Explain why or why not.</p> <p>a. $(3, 6)$ $(6, 3)$ $(-3, -3)$ $(0, 3)$</p>																
<p>Mr. Solis' score:</p> <hr/>	<hr/>																
	<p>b. $y^3 + x^2 = 10$</p> <hr/>																
	<p>C.</p> <div data-bbox="540 1234 917 1564" style="text-align: center;"> <p>Smalltown Teens With Cells Phones</p> <table border="1"> <thead> <tr> <th>Age in Years</th> <th>Number of Teens</th> </tr> </thead> <tbody> <tr><td>13</td><td>229</td></tr> <tr><td>14</td><td>273</td></tr> <tr><td>15</td><td>341</td></tr> <tr><td>16</td><td>430</td></tr> <tr><td>17</td><td>590</td></tr> <tr><td>18</td><td>530</td></tr> <tr><td>19</td><td>642</td></tr> </tbody> </table> <p>Copyright © 2007 Mrs. Orosz's Math Classes, Inc. All Rights Reserved. http://www.mathgoats.com</p> </div> <hr/>	Age in Years	Number of Teens	13	229	14	273	15	341	16	430	17	590	18	530	19	642
Age in Years	Number of Teens																
13	229																
14	273																
15	341																
16	430																
17	590																
18	530																
19	642																

SCORES	LT 2B
<p>Your predicted average score:</p> <hr/> <p>Mr. Solis' score:</p> <hr/>	<p>2. Find the domain of the following functions:</p> <p>a.) $f(x) = \frac{x^3}{\sqrt{3x-3}}$</p> <p>b.) $f(x) = \frac{\sqrt{x}}{2x^2 + 5x - 3}$</p> <p>c.) $f(x) = \frac{3x}{\sqrt{4-x^2}}$</p>
<p>Your predicted average score:</p> <hr/> <p>Mr. Solis' score:</p> <hr/>	<p>3. Write a function whose domain is R and explain why that is so.</p> <hr/> <hr/> <hr/>

SCORES	LT 2D
Your predicted score: <hr/>	4. Find $f \circ g \circ h$ if
Mr. Solis' score: <hr/> <hr/>	$f(x) = \frac{2-x}{x}$ $g(x) = 2x \text{ and}$ $h(x) = x^2$
	4. Using the same functions as above, find $f \circ f$.
	5. If $F(x) = \sqrt{\frac{2x^2}{7x-3}}$ find $f(x)$, $g(x)$, and $h(x)$ such that $F(x) = f \circ g \circ h$. Show all of your work!

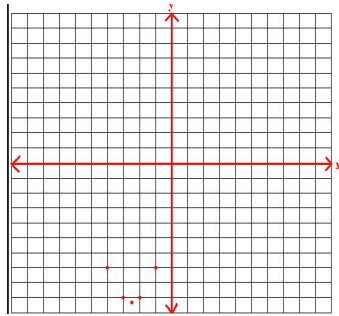
SCORES	LT 2F
Your predicted score: <hr/>	
Mr. Solis' score: <hr/>	$f(x) = \left\{ \begin{array}{ll} \frac{1}{x} & \text{for } x > 3 \\ -2x & \text{for } 0 \leq x \leq 3 \\ x^3 - 3 & \text{for } -2 \leq x < 0 \\ x & \text{for } x < -2 \end{array} \right.$
	<p>6. Evaluate the functions above at the given values.</p> <p>a) $f(1)$ b.) $f(-5)$ c.) $f(-1)$</p> <p>7. Graph each of the following functions by listing the transformations <i>in order</i> then transform the parent graph and show the final sketch on the coordinate plane.</p> <p>$f(x) = -x^2 - 2$</p> <p>Parent function: _____</p> <p>Transformations in ORDER:</p> 

8. Graph each of the following functions by listing the transformations *in order* then transform the parent graph and show the final sketch on the coordinate plane.

$$f(x) = |x - 2| + 4$$

Parent function: _____

Transformations in ORDER:



9. Write a function for the descriptions of the transformations below:

a.) Square Root: horizontal shift 2 units to the right.

b.) Cubic: horizontal shift 3 units to the left and 1 unit down.
