**Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date Due: \_\_\_\_\_\_\_\_\_\_\_**

**Common Core Algebra I Regents Review #1 Take Home Quiz # 1**

***Directions*:** Choose the best answer.  Answer ALL questions. Show ALL work in column 2. **If there is no mathematical work to be shown, write an explanation or definition to support your answer!** This counts as a quiz grade!!! Use your calculator to check your answers. Each question is worth 2 points.

|  |  |
| --- | --- |
| 1. The value of   (-3)2   is   [1]  9        [2]  3     [3]   -9    [4]  -3 | Work |
| 1. Operat16is equivalent to   [1]  Operat17    [2] Operat18    [3]  Operat19  [4]  Operat20 | Rule: |
| 1. Operat21   [1]  -3087    [2]  343     [3]  3087   [4]  -343 | Work |
| 1. The expression Operat22  is equivalent to    [1]  Operat23       [2]  Operat24     [3]  Operat25    [4]  Operat26 | Rule: |
| 5.  [1]      [2]  [3]   [4] | Rule: |
| 6. **Simplify  -**  [1]       [2]   [3]     [4] | Work |
| 7. **square the binomial**  [1]      [2]     [3]     [4] | Work: Foil or double distribute |
| 8.  [A]  [B]  [C]  [D] | Rule: |
| 9.Which of the following are expressions, not equations?  q3908  [1] *a* and *b*, only [2] *c*, *d* and *f*, only  [3] *a*, *b* and *e*, only [4] All of the choices are expressions. | Work |

|  |  |  |
| --- | --- | --- |
| 10.If , then  equals  [1]  -36 [2]  -6 [3]  6 [4]  18 |  | |
| 11.When 3*g*2 - 4*g* + 2 is subtracted from  7*g*2 + 5*g* - 1, the difference is  [1] -4*g*2 - 9*g* + 3  [2] 4*g*2 + *g* + 1  [3] 4*g*2 + 9*g* - 3  [4] 10*g*2 + *g* + 1 | |  | |
| 12. The length of a rectangle is 5 units more than the width, *w*. Which expression represents the area of the rectangle?   1. *w*2 + 25 2. 5*w* + 25 3. *w*2 + 5*w* 4. 4*w*2 + 5*w* | |  | |
| 13. The length of a rectangle is 4 units less than the width, *w*. Which expression represents the perimeter of the rectangle?   1. 2*w* − 4 2. 2*w* − 8 3. 4*w* – 4 4. 4*w* − 8 | |  | |
| 14. When solving the equation 3(2*x*2 + 4) − 5 = 10*x*2 + 11, Sara wrote 3(2*x*2 + 4) = 10*x*2 + 16 as her first step. Which property justifies Sara’s first step?   1. Multiplication property of equality 2. Commutative property of addition 3. Addition property of equality 4. Distributive property of multiplication over addition | |  | |
| 15. Solve for x and list number the property is used on each step. | |  | |
| 16.The product q230 is  [1] q230-001 [2] q230-002 [3] q230-003 [4] q230-004 | |  | |
| 17.If 3*ax* + *b* = *c,* then *x* equals  [1] *c* - *b* + 3*a* [2] *c* + *b* - 3*a*  [3] image [4] image | |  | |
| 18.What is the value of n in the equation  0.2(n − 6) = 2.8?  1. 8  2. 2  3. 20  4. 44 | |  | |
| 19.Simplify the expression:  5(2*n* − 3) + 4(−3*n* + 2)   1. −9 2. 8*n* − 1 3. −2*​n* – 1 4. −2*​n* − 7 | |  | |
| 20.Mr. Goldberg asked his son to give an example that illustrates the distributive law. Which of the following equations can his son use to demonstrate the distributive law?  [1]    [2]   [3]   [4] | |  | |