**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.$$2\left(4x-3\right)-8=4+2x$$ | $2\left(4x-3\right)-8=4+2x$ |
| 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. 82. 23. 204. 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]   |  |