**Algebra 1 Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Final Exam Review 2 (R) Date\_\_\_\_\_\_\_\_\_\_\_\_\_\_Period \_\_\_\_\_**

**Show ALL of your work! Be neat and organized!!**

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| **Unit 1 Part 2 – Radicals and Polynomials** |
| Simplify the following radicals or radical expressions.   |  |  |  | | --- | --- | --- | |  |  |  | |  |  |  | |  |  | |   Simplify the following polynomial expressions.   |  |  |  |  |  | | --- | --- | --- | --- | --- | | |  |  | | --- | --- | |  |  | |  |  | | |  | | --- | | **Unit 2 Part 1 – Solving and Justifying Linear Equations, Equation Word Problems, Consecutive Integers, Literal Equations/Rearranging Formulas** | | **Solve the following equations. Show All your Algebra steps!**  1.  A. a =45 B.  C. a = 15 D. a = 9  2.  3. | |  |  | | **Unit 2 Part 2**  Solve:   1. 8y – 6 > 6y + 24 2. Y > -- 9 B. y > -- 15 C. y > 9 D. y > 15 3. Jerry’s income Y consists of at least $42,000 plus a 6% commission on all of his sales, x.   Which inequality represents Jerry’s income for 1 year?   1. B.   C. D.   1. To **eliminate the variable y** in the system of equations  you would multiply the **first equation** by which number? 2. – 2 B. 2 C. 3 D. 6   Solve. Show ALL work. Graph on a number line.  5. 6.  <http://faculty.catawba.edu/costerhus/graphpaperandmagicsquares/coordinateplane.gif>7. Solve the following system by graphing.  y = x + 5  -- 2x + 2y = 10 |  |  |   **Final Exam Review Packet #3**  **Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**  1. Fill in the properties for the equations below:   |  |  | | --- | --- | |  | Given | |  |  | |  |  | |  |  | |  |  |   2. Fill in the properties for the statements below:   |  |  | | --- | --- | |  | Given | |  |  | |  |  | |  |  |   Solve each system by elimination:  3. 8x + y = -16 4. 8x + 14y = 4  -8x + y = -4 x – 7y = -10 |
| |  |  | | --- | --- | | **Unit 2 Part 3** | | | For the following problems state whether or not the relation is a function.  3  1  -1  6  4  1  0  -1  Explain your answer. If it is a function, state the domain and range. | | | **Function:**  **Explanation:**  **Domain:**  **Range:** | 1. {(2, -1), (5, -1), (4, 0), (2, 2)}   **Function:**  **Explanation:**  **Domain:**  **Range:** |  1. {(2, 2), (5, -1), (4, 0), (2, 2)}   **Function:**  **Explanation:**  **Domain:**  **Range:** |
|  |
| 1. {(2, -1), (4, -1), (4, 0), (3, 2)}   **Function:**  **Explanation:**  **Domain:**  **Range:**   |  |  | | --- | --- | | Use the following functions to answer #5 – 8. | | | 1. f(-2) 2. g(4) | | 1. h(3) 2. g(4) | 1. If m(x) = 4x – 3 and the domain is {1, 3, 5},   what is the range of m(x)? | |
| **Unit 3 Part 1** |

**Factor Completely:**

**1. **

**2.**

**3.**

**4. **

**5. **

**5. **

**6. **

**7.  **

**8. **

**9.**