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

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

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

|  |
| --- |
| **Unit 1 Part 2 – Radicals and Polynomials** |
| Simplify the following radicals or radical expressions.

|  |  |  |
| --- | --- | --- |
| 1.
 | 1.
 | 1.
 |
| 1.
 | 1.
 | 1.
 |
| 1.
 |  |

Simplify the following polynomial expressions.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 1.

|  |  |
| --- | --- |
| 1.
 | 1.
 |

 | 1.
 | 1.
 |
|

|  |
| --- |
| **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 = 92.  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. $y \leq 42,000+6x$ B. $y \geq x+ .06 (42,000)$

C.$ y\geq 42,000+ .06x$ D. $y \geq 42,000+6x$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. $2 x+1>11$ 6. $4n \geq 6n-18$http://faculty.catawba.edu/costerhus/graphpaperandmagicsquares/coordinateplane.gif7. 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. 31-16410 -1Explain 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.**