Algebra 1 Midterm 2018 Retake Alternate Assignment

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Class Period: \_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Dimensional Analysis** - Pg. 128

Read Example 4, then complete the following practice problems from the textbook page:

|  |  |
| --- | --- |
| #6 | #7 |

**Radical Operations**

Page 621:

Define Radical Function: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Define Radicand: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Page 628:

Define Radical Expression: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Read Examples 1-4, then complete the following practice problems on page 631:

|  |  |
| --- | --- |
| #4 | #8 |
| #11 | #12 |
| #20 | #26 |

On page 632, complete the Challenge problems in number 53:

|  |  |  |
| --- | --- | --- |
| a. | b. | c. |

**Polynomials:**

On Page 465, define the following:

Polynomial: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Binomial: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Trinomial: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Read Examples 1-4, then complete the following practice problems on page 468

|  |  |
| --- | --- |
| #2 | #3 |
| #4 | #26 |
| #34 | #35 |

**Functions**:

On page 47, define the following:

Function: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Read Examples 1-3, then on page 50, define the following:

Function Notation: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Read Example 4, then complete the following practice problems on page 51

|  |  |
| --- | --- |
| #6 (Also, find the domain and range) | #11 |
| #14 | #33 |
| #36 | #38 |

Read pages 56-58 about End Behavior of Functions. Then, complete the following practice problems on page 59:

|  |  |
| --- | --- |
| #4 | #5 |

**Linear Equations:**

On Page 155, define the following:

Linear Equation: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Standard Form: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

On page 157, read Examples 3-5, then complete the following practice problems on page 159:

|  |  |
| --- | --- |
| #5 | #6 |
| #7 | #8 |
| #13 | #18 |

On page 172, define the following, and read Examples 1-2:

Rate of Change: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

On page 174, define the following:

Slope: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Read Examples 4-5, then complete the following practice problems on page 177:

|  |  |
| --- | --- |
| #4 | #6 |
| #8 | #9 |
| #12 | #13 |

On page 126, read Examples 1-3, then complete the following practice problems on page 128:

|  |  |
| --- | --- |
| #2 | #3 |
| #4 | #8 |
| #9 | #10 |

Inequalities

On page 285, define the following:

Inequality: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Show each of the following signs:

Greater Than \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Less Than \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Less Than or Equal To\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Greater Than or Equal To\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

On page 285, read Examples 1-3, then complete the following practice problems on page 288:

|  |  |
| --- | --- |
| #7 | #9 |
| #13 | #27 |
| #35 | #36 |

**Forms of Linear Equations**

Look back to pg 3 of this packet to define the following:

Standard Form: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

On textbook Page 216, define the following:

Slope-Intercept Form: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

On Page 233, define the following:

Point-Slope Form: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Read Examples 1-4, then complete the following practice problems on page 235:

|  |  |
| --- | --- |
| #2 | #4 |
| #7 | #12 |
| #19 | #24 |
| #28 | #30 |

**Systems of Equations**

On page 335, define the following:

System of Equations: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Sketch the Graph section from the ConceptSummary section on page 335:

|  |  |  |  |
| --- | --- | --- | --- |
| **Number of Solutions** | Exactly one | Infinite | No solution |
| **Graph** |  |  |  |

On page 336, read Examples 1-2, then complete the following practice problems from page 338:

|  |  |
| --- | --- |
| #8 | #10 |
| #11 | #12 |
| #16 | #19 |

On page 350, define the following:

Elimination: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Read Examples 1-3, then complete the following practice problems from page 353:

|  |  |
| --- | --- |
| #2 | #3 |
| #10 | #15 |
| #24 | #25 |

On page 357, read Examples 1-3, then complete the following practice problems from page 359:

|  |  |
| --- | --- |
| #2 | #3 |
| #8 | #14 |
| #16 | #22 |

**Arithmetic Sequences**

On page 189, define the following:

Sequence:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Terms of the Sequence: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Arithmetic Sequence: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Common Difference: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

On page 190, find the Explicit Formula in the KeyConcept section:

|  |  |
| --- | --- |
| Explicit Formula |  |

On page 190, read Examples 1-3, then complete the following practice problems on page 193:

|  |  |
| --- | --- |
| #5 | #6 |
| #8 | #10 |
| #18 | #20 |

**Factoring and Solving Quadratics**

On page 504, read Examples 1-4, then complete the following practice problems on page 507:

|  |  |
| --- | --- |
| #2 | #3 |
| #6 | #10 |
| #20 | #23 |

On page 522, define the following:

Perfect Square Trinomials: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

On page 523, read Examples 1-2, then complete the following practice problems on page 526:

|  |  |
| --- | --- |
| #1 | #14 |
| #16 | #22 |
| #24 | #26 |

On page 574, define the following:

Completing the Square: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

On page 575, read Examples 2-3, then complete the following practice problems on page 577:

|  |  |
| --- | --- |
| #10 | #16 |
| #19 | #21 |
| #27 | #30 |

On page 583, find the Quadratic Formula:

|  |  |
| --- | --- |
| Quadratic Formula |  |

On page 583, read Examples 1-3, then complete following practice problems on page 587:

|  |  |
| --- | --- |
| #2 | #4 |
| #16 | #22 |
| #25 | #29 |
| #32 | #27 |