Math I Unit 4 Study Guide

Teacher:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Student Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

|  |  |
| --- | --- |
| **Objective** | **Score** |
| 1 | A B NY |
| 2 |  A B NY |
| 3 | A B NY |
| 4 | A B NY |
| 5 | A B NY |

ANSWERS:

|  |
| --- |
| **1.**  |
| **2.** |
| **3.** |
| **4.** |
| **4/4 = 100** | **3/4 = 80** | **0-2 = NY** |
| **5.** |
| **6.** |
| **7.** |
| **8.** |
| **4/4 = 100** | **3/4 = 80** | **0-2 = NY** |
| **9.** |
| **10.** |
| **11.** |
| **12.** |
| **4/4 = 100** | **3/4 = 80** | **0-2 = NY** |
| **13.** |
| **14.** |
| **15.** |
| **16.** |
| **4/4 = 100** | **3/4 = 80** | **0-2 = NY** |
| **17.** |
| **18.** |
| **19.** |
| **20.** |
| **4/4 = 100** | **3/4 = 80** | **0-2 = NY** |

DIRECTIONS: Do all work on separate scratch paper. Your work must be neat, well organized, complete, and lead to the answer you give, circle your answers. Copy your answers to the appropriate place provide on this test.

**OBJ. 1: Simplifying Exponents**

**1.**  

2. 

**3.** 

**4. **

**OBJ. 2: Addition and Subtraction of Polynomials**

**5.** 

6. 

7. 

8. 

**OBJ. 3: Application**

**9.** The area of a trapezoid can **10.** What is the value of x when

be found using the formula the perimeter of the triangle

, where *A* is the area, below is 93?

 *h* is the height, and *b1* and *b2* are the

lengths of the bases. What is the area

of the trapezoid below as an expression

10x – 3

 in *simplest* form?

4x + 5

 *b*1 = *x* + 5

–8x – 5

*h* = 10

*b*2 = *x* – 3

 **12.** If the perimeter of the triangle

 is 9x2 – 16x + 32, what is the

polynomial that represents the.

**11.** Find the area of the shaded region. missing side length.

SMALL rectangle BIG rectangle

A = 5x2 +16 x A= 36x2 – 42x – 7





 **?**

**OBJ. 4: Review Questions**

13. Matthew plans to sell king size candy bars at school. His profit can be represented by the equation: P = 1.50c – 35, where P represents Matt’s profit and c represents the number of candy bars he sold. What is the meaning of the y-intercept in the context of the problem?

14. Write the equation of the line that is perpendicular to $5x-2y=10$ and goes through the point (-15, 8)

15. Write a reasonable domain and range given the following scenario: Alan spent 10 dollars to purchase 100 pencils to sell at school. He plans to sell each pencil for $0.50.

16. Write an equation to find the value of x so that the polygons below have the same perimeter. Then solve.

2x-5

x-3

2x-7

x-1

3x-11

**Calculator Inactive**

**OBJ. 5:**

17. Simplify: $\sqrt{49x^{6}y^{4}z^{2}}$

18. Simplify: $\sqrt[3]{27x^{3}y^{12}z^{6}}$

$$3x^{2}-2x+1$$

19. Find the perimeter of the rectangle:

$$2x^{2}$$

20. Find the perimeter of an equilateral triangle with side length, $4a^{2}b^{3}$