Foundations of Math I: Unit 2 Study Guide

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

**OBJ. 1: Solving Multi-step/Variables on Both Sides Equations**

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

1. Solve for x; 6(x + 2) – 5x = 18
2. Solve for x; $17= -2\left(x-5\right)+3$
3. Solve for x: $4x+3=2x+5$
4. Solve for x: $6\left(x+1\right)=3x-3$

**OBJ. 2: Solving Multi-step/Variables on Both Sides Equations (2)**

1. Solve for x; $10= -2\left(x-5\right)$
2. Solve for x: $ 3\left(4x-3\right)= -6+12x$

A. x = 12 C. Infinitely Many Solutions

B. No solution D. x = 0

1. Solve for x: $\frac{1}{2}\left(8x-6\right)-x=5\left(x+2\right)-3$
2. Solve for x: $4\left(x-3\right)-4=5-(2x+3)$

**OBJ. 3: Word Problems(1)**

5. The sum of three consecutive integers is 84. What are the integers?

6. The width of a rectangle is 4 more than its length. The perimeter is 64. State the dimensions of the rectangle.

7. Anne and Mary have a combined age of 30. Anne is twice Mary’s age. How old is Mary?

8. Michael has $30. He wants to purchase 5 CD’s that are $8 each. How much more money does he need?

**OBJ. 4: Word Problems(2)**

9. The length of a rectangle is 4 inches less than twice its width. The perimeter of the rectangle is 64 inches. What is the area of the rectangle?

10. Jack and Jill have a combined age of 49. Jack’s age is 4 more than 4 times Jill’s age. How old is Jill?

11. Find 3 consecutive even integers, such that twice the smallest integer is 12 more than the largest integer.

 12. Find the largest of three consecutive odd integers whose sum is 99.

**OBJ. 5: Calc Inactive**

17. $-8x + 2 = -9 -7x$ 18. $2(4x-3)-8 = 4+2x$

19. $12 = -4(-6x-3)$ 20. $-18 -6m = 6(1+3m)$