**Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_**

**ANSWER KEY**

**Worksheet 10**

1. Name the four Addition of Integer Algorithms.

a. Chip Model

b. Charged Field Model

c. Number Line Model

d. Pattern Model

2. Use the Chip Model to add or subtract and show your work:

2

Add (-5) + 7 = \_\_\_\_\_\_\_\_\_\_





3. Use the Chip Model to add or subtract and show your work:

-2

Subtract 5 – 7=\_\_\_\_\_\_\_\_\_\_





4. What is the definition of absolute value.

The ***absolute value*** of a number *a*, written |*a*|, is the distance on the number line from 0 to *a*.

5. Use the Commutative Property of Addition to rewrite the following statement:

9 + 8

8 + 9 =\_\_\_\_\_\_\_\_\_\_

6. Use the Associative Property of Addition to rewrite the sum of the following statement:

2 + (7 + 3)

(2 + 7) + 3 =\_\_\_\_\_\_\_\_\_\_

7.Which property of Addition is represented by the following statement:

Identity Property of Addition

9 + 0 = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

8. What is the additive inverse of the following numbers:

4

a. (-4) \_\_\_\_\_\_\_\_\_\_

-8

b. 8 \_\_\_\_\_\_\_\_\_\_

**Add or Subtract the following without using a calculator. Show your work using the stated addition or subtraction algorithm.**

4

9. (-5) – (-9) + =\_\_\_\_\_\_\_\_\_ (Use the Charged Field Model)

- - - - - represents – 5

- - - - - - - - - ++++ represents -5 (in a way I can now take 9 negatives away by making zeros)

Take 9 negatives away to get 4.

3

10. 6 + (-3) = \_\_\_\_\_\_\_\_\_\_ (Use the Number Line Model)

| | | | | | | | | | | |

\|

-3 -2 -1 0 1 2 3 4 5 6 7 8

11. 6 – 9 = \_\_\_\_\_\_\_\_\_\_ (Use the Chip Model)

-3





-1

12. (3) + (-4) = \_\_\_\_\_\_\_\_\_\_ (Use the Pattern Model)

|  |
| --- |
| 3 + 3 = 6 |
| 3 + 2 = 5 |
| 3 + 1 = 4 |
| 3 + 0 = 3 |
| 3 + -1 = 2 |
| 3 + -2 = 1 |
| 3 + -3 = 0 |
| 3 + -4 = -1 |

15

13. 12 – (-3) = \_\_\_\_\_\_\_\_\_\_ (Use the Missing Addend Model)

12 = -3 + n = 15