

Mini- Lesson #2 - Adding Integers

Learning Objectives: (What I should be able to do after the lesson!)

_____ I can create zero pairs

_____ I can use the chip model and number line model to represent addition problems and solve them

_____ I can formulate rules that I can use to add integers

Refresh: What is an integer ?	<ul style="list-style-type: none">• The _____ of _____ numbers and their _____. Examples:
Refresh: What are opposites ?	<ul style="list-style-type: none">• Numbers the _____ distance from _____ on a number line but on the other side of _____. Examples:
Modeling integer addition using chip model:	<ul style="list-style-type: none">• Black chip = +1• Red chip = -1 So... $1 \text{ black chip} + 1 \text{ red chip} = 0$ Model with chips: 1) $-8 + -7$ 2) $-8 + 7$ 3) $-4 + 6$

Practice Adding Integers

Directions: Make a chip board and give the number sentence with the answer.

1) $3 + 2$

10) $2 + -8$

2) $-2 + -2$

11) $7 + -5$

3) $-6 + -3$

12) $-2 + 5$

4) $-4 + -5$

13) $7 + -9$

5) $-5 + -1$

14) $-4 + 1$

6) $-2 + -8$

15) $-5 + 5$

7) $-4 + 4$

16) $7 + -7$

8) $-6 + 4$

17) $10 + -5$

9) $-3 + 6$

**Model integer
addition using a
number line:**

Example 1:

Starting value

ADD

If second value is...



8

+

a) positive - move that many
values to the right

OR

b) negative - move that many
values to the left

-14

Example 2: $5 + -7$

- Start at the beginning value, which is _____
- Add the second value. Since the value is _____, you move 7 values to the _____ on the number line.

Example 3: $-6 + -9$

Practice Adding Integers Using A Number Line

Directions: Use a number line to add these problems:

1) $-1 + -1$

10) $-7 + -14$

2) $14 + -2$

11) $10 + -15$

3) $4 + -12$

12) $10 + -19$

4) $-6 + 7$

13) $-13 + 0$

5) $-12 + -5$

14) $-3 + 12$

6) $7 + -4$

15) $-7 + 9$

7) $8 + 15$

16) $4 + 10$

8) $-3 + -11$

9) $-10 + 10$

RULES FOR ADDING INTEGERS

Adding 2 Positive Integers	Adding 2 Negative Integers	Adding 1 Positive and 1 Negative Integer
What do you notice about these two types of problems?		
We will call these types of problems _____		We will call these types of problems _____

Practice Adding Integers Using Integer Rules

Directions: Using the rules for adding integers, solve these problems:

1) $-9 + 39$

10) $-34 + -26$

2) $-100 + 100$

11) $102 + -15$

3) $-45 + 0$

12) $1 + -19$

4) $-20 + -30$

13) $-29 + 0$

5) $-2 + 100$

14) $-38 + 42$

6) $37 + -43$

15) $-57 + 39$

7) $8 + 32$

8) $-38 + 111$

9) $-100 + 100$