**Adding Rational Numbers #2**

**Different Sign**:

Ex (1): During the day, the temperature increases by **4.5** degrees. At night, the temperature decreases by **7.5** degrees. What is the overall change in temperature?

Step(1): Write the equation (Temp increases by 4.5 then decreases by 7.5)

 4.5 + (-7.5) \*\**Take the information from left to right*\*\*

Step(2): Solve the equation

 4.5 + (-7.5) =  **-3 degree** or 4.5 – 7.5 = **-3 degree**

Ex (2): Khadija writes a check for **$2.50**. Then he deposits **$6** in his checking account. What is the overall increase or decrease in the account balance?

Step(1): Write the equation (Write a check for $2.50 then deposits $6)

 – 2.5 + 6 \*\**Writing a check is negative, Depositing is positive*\*\*

Step(2): Solve the equation

 – 2.5 + 6 = **3.5** \*The account balance increased by $3.50\*

**Additive Inverse:**

Ex (3): Trinity adds **¾** cup of chicken broth to a pot. Then she takes **¾** cup of chicken broth out of the pot. What is the overall increase or decrease in the amount of chicken broth in the pot?

Step(1): Write the equation (Add ¾ to the pot then subtract ¾ from the pot)

 $\frac{3}{4} +(-\frac{3}{4})$

Step(2): Solve the equation

 $\frac{3}{4} +\left(-\frac{3}{4}\right) = 0$ \*\*The overall change is 0 cups\*\*