Name $\qquad$ Date $\qquad$ Period $\qquad$

## Math Homework 2-3

1. If a football player gains 40 yards on a play, but on the next play, he loses 10 yards, and on a later play he gained another 60 yards, what would his total yards be for the game? Write an equation and solve it, modeling your answer using the number line below.

2. Find the sum, showing your steps on the number line.: $-4+(-6)+12=$

3. Below is a table showing the change in temperature from morning to afternoon for one week.
a. Use the vertical number line to help you complete the table You don't need to draw the vectors for each problem. As an example, the first row is completed for you.

Change in Temperatures from Morning to Afternoon

| Morning <br> Temperature | Change | Afternoon <br> Temperature | Equation |
| :---: | :---: | :---: | :---: |
| $1^{\circ} \mathrm{C}$ | Rise of $3{ }^{\circ} \mathrm{C}$ | $4{ }^{\circ} \mathrm{C}$ | $1+3=4$ |
| $2{ }^{\circ} \mathrm{C}$ | Rise of $8{ }^{\circ} \mathrm{C}$ |  | $2+8=$ |
| $-2^{\circ} \mathrm{C}$ | Fall of $6^{\circ} \mathrm{C}$ |  | $-2+(-6)=$ |
| $-4^{\circ} \mathrm{C}$ | Rise of $7{ }^{\circ} \mathrm{C}$ |  |  |
| $6^{\circ} \mathrm{C}$ | Fall of $9{ }^{\circ} \mathrm{C}$ |  | $6+(-9)=$ |
| $-5^{\circ} \mathrm{C}$ | Fall of $5^{\circ} \mathrm{C}$ |  |  |
| $7{ }^{\circ} \mathrm{C}$ | Fall of $7{ }^{\circ} \mathrm{C}$ |  |  |

b. Do you agree or disagree with the following statement: "A rise of $-7^{\circ} \mathrm{C}$ " means "a fall of $7^{\circ} \mathrm{C}$ "? Explain. (Note: No one would ever say, "A rise of -7 degrees"; however, mathematically speaking, it is an equivalent phrase.)

