Homework: Unit 2 Lesson 3

Lesson Summary

* Adding an integer to a number can be represented on a number line as counting up when the integer is positive (just like whole numbers) and counting down when the integer is negative.
* Arrows can be used to represent the sum of two integers on a number line.
1. Below is a table showing the change in temperature from morning to afternoon for one week.

$$10$$

$$ $$

$$ $$

$$5$$

$$ $$

$$ $$

$$0$$

$$ $$

$$ $$

$$-5$$

$$ $$

$$ $$

$$-10$$

* 1. Use the vertical number line to help you complete the table. As an example, the first row is completed for you.

**Change in Temperatures from Morning to Afternoon**

|  |  |  |  |
| --- | --- | --- | --- |
| **Morning****Temperature** | **Change** | **Afternoon Temperature** | **Equation** |
| $$1°C$$ | Rise of $3°C$ | $$4°C$$ | $$1+3=4$$ |
| $$2°C$$ | Rise of $8°C$ |  |  |
| $$-2°C$$ | Fall of $6°C$ |  |  |
| $$-4°C$$ | Rise of $7°C$ |  |  |
| $$6°C$$ | Fall of $9°C$ |  |  |
| $$-5°C$$ | Fall of $5°C$ |  |  |
| $$7°C$$ | Fall of $7°C$ |  |  |

* 1. Do you agree or disagree with the following statement: “A rise of $-7°C$” means “a fall of $7°C$”? Explain. (Note: No one would ever say, “A rise of $-7$ degrees”; however, mathematically speaking, it is an equivalent phrase.)

 **- - -> Question #2 on back**

For Problems 2, refer to the Integer Game.

1. Terry selected two cards. The sum of her cards is $-10$.
	1. Can both cards be positive? Explain why or why not.
	2. Can one of the cards be positive and the other be negative? Explain why or why not.
	3. Can both cards be negative? Explain why or why not.