Topic 5: Adding & Subtracting Integers - Block 3 Homework

1. Think about how you could model each sum with algebra tiles. Identify each number as positive or negative.

Sum	Positive or Negative?
$-13 + -14$	
$18 + -7$	
$19 + -28$	
$-56 + 63$	

2. Remember how we modeled subtraction on a number line? Imagine you are on a number line with this subtraction problem. Where would you stop after you skated to model the problem?

$$-17 - (-23) = \underline{\hspace{1.5cm}}$$

3. Pierce's brother wanted to do a scientific experiment, too. He examined the freezing points of different liquids. The results were that water froze at 0°C, sports drinks at -4°C, sugar water at -1°C, and fruit juice at -2°C. Order these temperatures from warmest to coldest.

Warmest			Coldest

4. The freezing point of a sports drink was -4°C and fruit juice was -2°C. Which of the foll0wing number sentences can be used to determine the difference between the freezing point of the sports drink and the fruit juice? **Select all that apply.**

☐ (−4) + (−2)= 2   ☐ (−4) −(−2)= −2

☐ (−4) + (−2) = −6   ☐ 4 + (−2) = 2

☐ −4 + 2 = −2

5. For each of the following statements, determine whether the statement is **always true**, **sometimes true**, **or never true**.

Statement	Always, Sometimes, or Never True?
The sum of two positive integers is positive	
The sum of two negative integers is negative.	
The difference between two positive integers is positive.	
The difference between two negative integers is negative.	
A positive integer minus a negative integer is negative	