Lesson 2 Summary

If it is 42° outside and the temperature increases by 7° , then we can add the initial temperature and the change in temperature to find the final temperature.

$$42 + 7 = 49$$

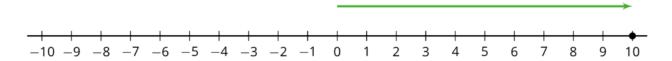
If the temperature decreases by 7° , we can either subtract 42-7 to find the final temperature, or we can think of the change as -7° . Again, we can add to find the final temperature.

$$42 + (-7) = 35$$

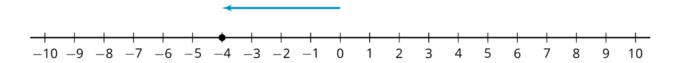
In general, we can represent a change in temperature with a positive number if it increases and a negative number if it decreases. Then we can find the final temperature by adding the initial temperature and the change. If it is 3° and the temperature decreases by 7° , then we can add to find the final temperature.

$$3 + (-7) = -4$$

We can represent signed numbers with arrows on a number line. We can represent positive numbers with arrows that start at 0 and points to the right. For example, this arrow represents +10 because it is 10 units long and it points to the right.



We can represent negative numbers with arrows that start at 0 and point to the left. For example, this arrow represents -4 because it is 4 units long and it points to the left.



To represent addition, we put the arrows "tip to tail." So this diagram represents 3 + 5:



And this represents 3 + (-5):

