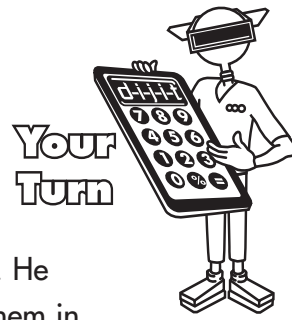




COURSE: **MSC IV**
 MODULE 4: **Integers & Order of Operations**
 UNIT 1: **Adding & Subtracting Signed Numbers**

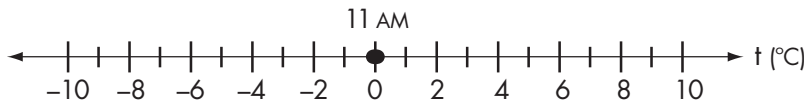


Exploring the Number Line & Absolute Value

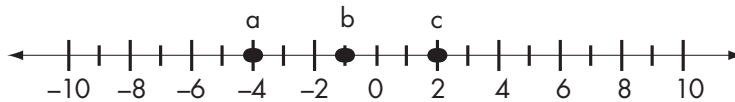
1. A weather forecaster is doing research for the Weather Society. He checks the temperature every hour for 10 hours and records them in a log as shown below.

Time	8AM	9AM	10AM	11AM	NOON	1PM	2PM	3PM	4PM	5PM
Temp (°C)	-6°C	-7°C	-4°C	-0°C	2°C	-2°C	1°C	-2°C	-3°C	-1°C

- a. At what times was the temperature above 0? _____
- b. What was the lowest temperature that day? _____
- c. At what time did the highest temperature occur? _____
2. The value for the temperature reading at 11 AM is shown on the number line below. Plot and label the values for the three readings at the times listed.



- a. 10 AM b. 2 PM c. 4 PM
3. Write the absolute values for the numbers shown on the number line.

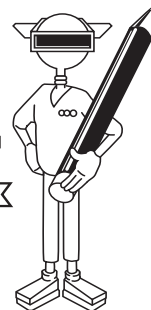


- a. _____
- b. _____
- c. _____



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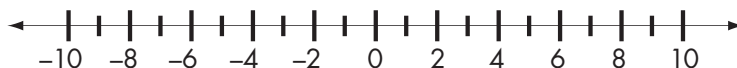
**Student
Logbook**



Adding with Absolute Value

As you work through the tutorial, complete the following statements and questions.

1. Complete the mathematical sentence that shows how Dijit changed the temperature. $-6^{\circ}\text{C} + \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$.
2. Give an example that shows that the sum of two numbers is not always greater than both.
3. Use this number line and show the distance between -6 and -2 . What should Dijit add to -6 to get to -2 on the freezer? _____



4. In what direction do you move on the number line to find the sum $-6 + (-4)$? _____
5. Find each sum.
 - a. $-6 + (-4) = \underline{\hspace{2cm}}$
 - b. $6 + (-4) = \underline{\hspace{2cm}}$
 - c. $-6 + 4 = \underline{\hspace{2cm}}$
6. Complete the steps for adding numbers with like signs.
 - a. Add the _____ of the numbers.
 - b. Then, give the answer the _____ sign as the numbers you added.
7. Complete the steps for adding numbers with unlike signs.
 - a. First, find the _____ between the absolute values of the numbers.
 - b. Give the answer the sign of the number with the _____ absolute value.

Key Words:

Integers
 Operations
 Addition
 Absolute value

Learning Objectives:

- Finding the sum of 2 or more signed numbers
- Using a number line to add 2 integers
- Using absolute value to find the sum of 2 integers