Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date \_\_\_\_\_\_\_\_\_\_\_\_

Lesson #1 – Integers and Absolute Value

Do Now:

1) The elevations, in feet, of three cities are marked on the number line shown on the right.

The point 0 on the number line represents sea level. Which statement must be true?

1. City P and City Q are above sea level.
2. City Q and City R are below sea level.
3. City P is above sea level and City Q is below sea level.
4. City P is above sea level and City R is below sea level.

2) What is the value of the expression below?

 2[3(42 + 1)] – 23

1. 156
2. 110
3. 94
4. 48

Directions: With you table partner, come up with as many words as you can to represent positive and negative integers.

|  |  |
| --- | --- |
| Positive Integers | Negative Integers |

Directions: Express each statement as an integer.

|  |  |
| --- | --- |
| 1. I spent $7.

  | 2) My skateboard ramp rises 5 feet. |
| 3) I lost a 5 dollar bill.  | 4) I had a fever. My temperature was 4o above normal. |
| 5) I received $10 for my birthday. | 6) I awoke two hours before dawn. |
| 7) I swam 500 feet below sea level. | 8) I made a profit of $50. |
| 9) I made a withdrawal of $75. | 10) The temperature dropped 12 degrees. |
| 11) I made a deposit of $25. | 12) The elevator descended 4 floors. |

**Directions:** Find the value of the following problems. Show your work.

|  |  |  |  |
| --- | --- | --- | --- |
| 1. ⃒ 14 ⃒
 | 1. ⃒ - 5 ⃒
 | 1. ⃒ 20 – 10 ⃒
 | 1. ⃒ 6 + 10 ⃒
 |

**Directions:** Complete the statement using <, >, or =.

|  |
| --- |
| 1. Compare 1 and ⃒ ⎻ 4 ⃒.
 |
| 1. ⃒ ⎻ 2 ⃒ \_\_\_\_\_\_\_\_\_\_ ⎻ 1
 | 1. ⎻ 7 \_\_\_\_\_\_\_\_\_\_ ⃒ 6 ⃒
 |
| 1. ⃒ 10 ⃒ \_\_\_\_\_\_\_\_\_\_ 11
 | 1. 9 \_\_\_\_\_\_\_\_\_\_ ⃒ ⎻ 9 ⃒
 |
| 1. \_\_\_\_\_\_\_\_\_\_
 | 1. \_\_\_\_\_\_\_\_\_\_
 |
| 1. Is the freezing point of airplane fuel or candle wax closer to the freezing point of water (0o)?

 Explain your reasoning.

|  |  |
| --- | --- |
| **Substance** | **Freezing Point ( °C)** |
| Butter | 35 |
| Airplane Fuel | ⎻ 53 |
| Honey | ⎻ 3 |
| Mercury | ⎻ 39 |
| Candle Wax | 55 |

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