**Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Date: \_\_\_\_\_\_\_\_\_\_\_ Hour: \_\_\_\_\_**

**Lesson 2 Study Guide**

**1.)**  Which expressions are equivalent?

Choose all that apply.

1. 29 - 11 and 29 + (-11) 18, 18 yes, equal
2. 47 - 5 and (-47) + (-5) 42, -52, no, not equal
3. 13 - (-7) and (-7) + (-13) 20, -20, no, not equal
4. -20 - (-11) and 11 + (-20) -9, -9, yes, equal

**2.)** Determine if each statement about the distance between numbers on a number line is correct.

Circle *true* or *false* for each statement.

1. The distance between 25 and -7 on a number line is 32. True False
2. The distance between -10 and 12 on a number line is 8. True False
3. The distance between -4 and -15 on a number line is 11. True False
4. The distance between 25 and -6 on a number line is 21. True False

**3.)** Sammy is playing a board game. At the end of the first game he has 20 points. During the second game, he loses 7 points. What expressions represents the total number of points Sammy has at the end of the second game?

Choose all that apply.

1. 20 - (-7)
2. 20 + 7
3. 20 + (-7)
4. -20 + (-7)
5. -20 - 7
6. 20 - 7

**4.)** Macy makes and sells dolls. She made a profit of $75 last week. This week, she donated some dolls to children in the hospital. Her profit at the end of the week can be represented by -$30.

**Part A**

Write a subtraction expression and an addition expression to represent Macy’s total profit for the two weeks combined.

**Subtraction expression**:\_\_\_\_\_\_\_\_\_\_75 - 30\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Addition expression**:\_\_\_\_\_\_\_\_\_\_\_\_\_75 + (-30)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Part B**

What is the difference between last week’s profit and this week’s profit?

**Show your work.**

**Answer:** $\_\_\_\_\_\_\_\_45\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**5.)** Zeinab says that the distance between (5,-3) and (5,-8) in the coordinate plane is

equal to |-3 - (-8) | units.

Adam says that the distance between the points (3,4) and (-8,4) in the coordinate plane is equal to |3+8| units.

Is either Zeinab or Adam correct? Explain

* Distance is 5 units, absolute value is also 5
* Distance is 11 units, absolute value is also 11
* Zeinab and Adam are both correct