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

**Study Guide**

**Topic 4 Review**

**Opposites**

|  |  |  |
| --- | --- | --- |
| 1) The opposite of | 2) The opposite of | 3) The opposite of 3.45 |
| 4) The opposite of 289 | 4) What is another word for opposite? | 5) What happens when you add a pair of opposites together? |

**Absolute Value**

|  |  |  |
| --- | --- | --- |
| 1) | 2) | 3) |
| 4) | 5) | 6) |
| 7) Define absolute value: | | |

**Adding Rational Numbers**

|  |  |
| --- | --- |
| 1) | 2) |
| 3) | 4) |
| 5) | 6) |
| 7) | 8) |
| 9) | 10) |

**Subtracting Rational Numbers**

|  |  |
| --- | --- |
| 1) | 2) |
| 3) | 4) |
| 5) | 6) |
| 7) | 8) |
| 9) | 10) |

**Graphing Equations**

|  |
| --- |
| 1. Graph the following equation on the number line below and solve: |
| 1. Graph the following equation on the number line below and solve: |
| 1. Graph the following equation on the number line below and solve: |
| 1. Determine what equation best represents the graph below: |
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| 1. Determine what equation best represents the graph below: |

**Problem Solving**

|  |
| --- |
| 1) Describe the difference between whole numbers and integers |
| 2) For a negative number, *x*, is the absolute value of *x* a positive number or a negative number? Explain. |
| 3) Identify whether each statement below is true or false:   * If a number is a positive integer, then the number is a whole number. \_\_\_\_\_\_\_ * If a number is negative, then its absolute value is negative. \_\_\_\_\_\_\_\_\_\_\_\_ * If a number is positive, then its opposite is positive. \_\_\_\_\_\_\_\_\_\_\_\_ |
| 4) Without actually adding, how can you tell if the sum of two numbers will be zero? Give an example. |
| 5) In four plays a football team gains 3 yards, loses 7 yards, loses 2 yards, and gains 15 yards. How many yards did the team gain after four plays? |

**Distance on a number line**

Represent on a number line and find the answer.

|  |  |
| --- | --- |
| The distance between 9 and -3 | The distance between -2 and -8 |

**Properties**

Name the property or provide an expression given the property.

|  |  |
| --- | --- |
| 1) | 2)  ASSOSIATIVE |
| 3) 5 | 4) 0  INVERSE |
| 5) | COMMUTATIVE |
| 7) =  ASSOCIATIVE | 8) |