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

**Study Guide for Unit 1 (Add/Subtract Rational Numbers) The Number System**

**Find the opposites of the numbers.**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **1.** | 3 \_\_\_\_\_ | **2.** | -5 \_\_\_\_\_ | **3.** | n \_\_\_\_\_ |

**4.** What is the opposite of 0? \_\_\_\_\_

**5. Graph the numbers on the number line.**

|  |  |
| --- | --- |
| 3, -2, 5.5, -7.5 |  |

|  |  |  |
| --- | --- | --- |
| **6.** | Write two different numbers that have a sum of zero. | \_\_\_\_\_ + \_\_\_\_\_ = 0 |

**Find the value of each expression.**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **7.** | |14| = \_\_\_\_\_ | **8.** | |-1| = \_\_\_\_\_ | **9.** | |3 - 8| = \_\_\_\_\_ | **10.** | |-2 + 14| = \_\_\_\_\_ |

|  |  |
| --- | --- |
| **11.** | Larry bungee jumped off a bridge. When he jumped he dropped 100 feet, went up 50 feet, dropped 40 feet, went up 30 feet, then dropped 20 feet. When he stopped bouncing around he was 30 feet from the ground. How tall was the bridge?  \_\_\_\_\_ ft. |

**How far apart are these numbers on a number line?**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **12.** | -10 and 5 = \_\_\_\_\_ | **13.** | -8 and -12 = \_\_\_\_\_ | **14.** | 1 and 9 = \_\_\_\_\_ |

**Re-write the subtraction problems as equivalent addition problems and solve.**

|  |  |  |  |
| --- | --- | --- | --- |
| **15.** | 2 - 9 = \_\_\_\_\_ + \_\_\_\_\_ = \_\_\_\_\_\_ | **16.** | -4 - (-2) = \_\_\_\_\_ + \_\_\_\_\_ = \_\_\_\_\_ |

|  |  |  |
| --- | --- | --- |
| **17.** | Marty had $25 in his checking account. He wrote a check for $53.25. How much money does he have in his checking account? | $ \_\_\_\_\_\_\_\_ |

**Find the sums or differences.**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **18.** | -3 + 9 = \_\_\_\_\_ | **19.** | 1/3 - 2 1/2 = \_\_\_\_\_ | **20.** | -1 1/5 + 3 = \_\_\_\_\_ |
|  |  |  |  |  |  |
|  |  |  |  |  |  |

**Plot the ordered pairs for problem 21 and 22. Label them “A” and “B” on the coordinate plane.**

21) A: (2,4)

22) B: (5,-2)

23) Please write down the ordered pair for letter “C” in the coordinate plane.

**C: (\_\_\_, \_\_\_)**

