**Absolute Value Extension Activity**

Absolute value is the distance a number is from 0. The absolute value of 5 and the absolute value of (−5) are equivalent because both numbers are five spaces from 0, just in opposite directions.

Complete the chart below using the absolute value rule: ***When adding numbers with different signs, find the difference of the absolute values of the numbers. The sum has the sign of the number with the greater absolute value.***

|  |  |  |
| --- | --- | --- |
| **Problem –**  **Add numbers with different signs.** | **Write the problem as the difference of the absolute values of the numbers.** | **Solve and explain.**  **Be sure the answer has the correct sign.** |
| *Example:*  (−9) + 5 = \_\_\_ | **|−9| − |5| = \_\_\_** | 9 − 5 = 4  *Since the number with the greater absolute value is (−9), the answer is negative.*  Answer: −4 |
| (−10) + 25 = \_\_\_ |  | Answer: \_\_\_\_ |
| 14 + (−19) = \_\_\_ |  | Answer: \_\_\_\_ |
| 8 + (−1) = \_\_\_ |  | Answer: \_\_\_\_ |
| (−3) + 7 = \_\_\_ |  | Answer: \_\_\_\_ |

**Absolute Value - Extension Activity (KEY)**

Complete the chart below using the absolute value rule: ***When adding numbers with different signs, find the difference of the absolute values of the numbers. The sum has the sign of the number with the greater absolute value.***

|  |  |  |
| --- | --- | --- |
| **Problem –**  **Add numbers with different signs.** | **Write the problem as the difference of the absolute values of the numbers.** | **Solve and explain.**  **Be sure the answer has the correct sign.** |
| *Example:*  (−9) + 5 = \_\_\_ | **|−9| − |5| = \_\_\_** | 9 − 5 = 4  *Since the number with the greater absolute value is (−9), the answer is negative.*  Answer: −4 |
| (−10) + 25 = \_\_\_ | ***|****−****10|* − *|25| = \_\_\_*** | ***10 − 25 = 15***  *Since the number with the greater absolute value is 25, the answer is positive.*  Answer:*15* |
| 14 + (−19) = \_\_\_ | ***|14|* − *|****−****19| = \_\_\_*** | ***14 − 19 =*** *−****5***  *Since the number with the greater absolute value is (−19), the answer is negative.*  Answer: *−5* |
| 8 + (−1) = \_\_\_ | ***|8|* − *|****−****1| = \_\_\_*** | ***8 − 1 = 7***  *Since the number with the greater absolute value is 8, the answer is positive.*  Answer: *7* |
| (−3) + 7 = \_\_\_ | ***|-3|* − *|7| = \_\_\_*** | ***3 − 7 = 4***  *Since the number with the greater absolute value is 7, the answer is positive.*  Answer: *4* |