Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Table #: \_\_\_\_\_\_\_ Period: \_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_

**4.1B Graphing Inequalities\_Classwork**

*Objective: graph and identify equation and inequalities as points and rays on a number line.*

*HW: textbook: 4.1B pg 128\_#17-25 ALL*

The \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of an inequality shows all of the solutions of the inequality on a number line.

* An open circle \_\_\_\_\_\_\_\_\_ is used when a number is not a solution
* A closed circle \_\_\_\_\_\_\_\_\_ is used when a number is a solution.
* An arrow to the left or right shows that the graph continues in that direction.

|  |  |  |  |
| --- | --- | --- | --- |
| **Open Circle** | **Open Circle** | **Closed Circle** | **closed Circle** |

Draw a graph for each inequality.

|  |  |
| --- | --- |
| 1. | 2. |
| 3. | 4. |
| 5. | 6. |
| 7. | 8. |

Write an inequality for each graph.

|  |  |
| --- | --- |
| 1. | 2. |
| 3. | 4. |
| 5. | 6. |

**WARM-UP**

Tell whether the given value is a solution of the inequality. Write TRUE or FALSE after you solve each problem.

|  |  |  |
| --- | --- | --- |
|  |  |  |