**Secondary Math 2 8.0 Homework Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period: \_\_\_\_\_\_\_**

**Interval Notation**:

Interval Notation is used as an alternative method of expressing inequalities. It represents all REAL numbers in a specified interval. The use of soft brackets ( or ) indicate that the endpoint is not included or that the interval is open. The use of hard brackets [ or ] indicate that the endpoint is included or that the interval is closed. We always list the endpoints of the interval in order of least to greatest. Since is a concept and cannot actually be reached, you will always use a soft bracket on either or

**Example**:

* would be expressed as
* would be expressed as
* would be expressed as
* or would be expressed as \*where the stands for “union” (oftentimes we leave out the and assume it to be implied, in which case

**Problem Sets**: Fill in the missing portions of the table.

|  |  |  |  |
| --- | --- | --- | --- |
|  | Inequality or Set | Graph | Interval Notation |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  | is all Real numbers |  |  |