Standard A.REI.3 **3.4 Solving Multi-Step Inequalities** Unit 1 Day 6

**Inequalities:** A way of describing a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ or \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ value.

* To solve inequalities, treat the problem as if it were a normal equation.
* Remember to \_\_\_\_\_\_\_ the symbol if multiplying or dividing by a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

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| Open or Closed Circle:  Shade to the right or left? | Open or Closed Circle:  Shade to the right or left? | Open or Closed Circle:  Shade to the right or left? | Open or Closed Circle:  Shade to the right or left? |

**Example 1:** Solve for . Check your solutions.

**You Try!** What are the solutions of the inequality? Check your solutions.

1.  
2.  

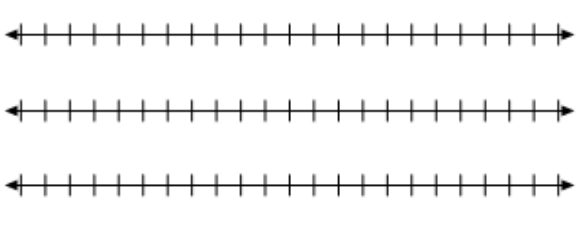
**Example 2:** Solve for each solution.

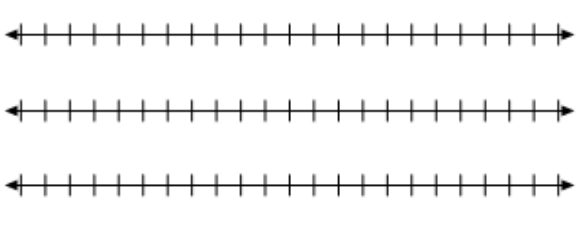
1.  
2.  

**Compound Inequality:** A relationship of two distinct inequalities joined by the words \_\_\_\_\_\_ or \_\_\_\_\_\_.

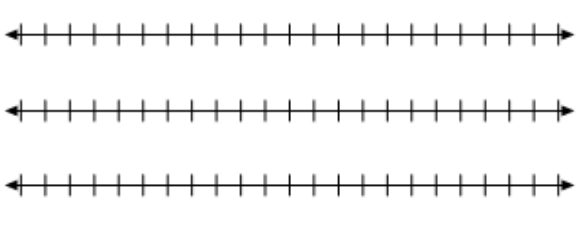
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| --- |
| **“AND”** Inequalities |
| * Two graphs \_\_\_\_\_\_\_\_\_\_\_\_\_\_ or come together. |
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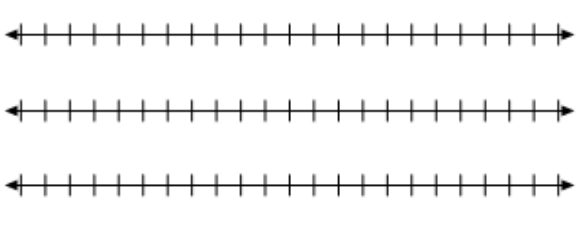
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| **“OR”** Inequalities |
| * Two graphs shoot off in \_\_\_\_\_\_\_\_\_\_\_\_ directions |
|  |

**Example 3:** What are the solutions of ? Graph the solutions.

**You Try!** What are the solutions of ? Graph the solutions.

**Example 4:** What are the solutions ofor  ? Graph the solutions.



  
**Example 3:** What are the solutions ofor  ? Graph the solutions.