Pre-Algebra Graphs of Inequalities in One Dimension

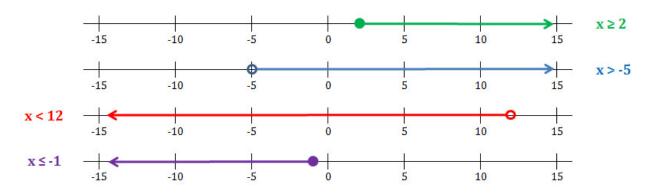
Inequalities in one dimension are generally graphed on the number line. Alternatively, if it is clear that the graph is one-dimensional, the graphs can be shown in relation to a number line but not specifically on it (examples of this are on the next page).

One-Dimensional Graph Components

- The endpoint(s) The endpoints for the ray or segment in the graph are shown as either open or closed circles.
 - o If the point is included in the solution to the inequality (i.e., if the sign is \leq or \geq), the circle is closed.
 - o If the point is not included in the solution to the inequality (i.e., if the sign is < or >), the circle is open.
- The arrow If all numbers in one direction of the number line are solutions to the inequality, an arrow points in that direction.

 - o For > or \ge signs, the arrow points to the right (\longrightarrow).
- The line in a simple inequality, a line is drawn from the endpoint to the arrow. If there are two endpoints, a line is drawn from one to the other.

Examples:



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