Coreq Support for Section 1.7

Topic 1: Writing Sets Using Set-Builder and Interval Notation

There are two types of notations we can use to describe a certain set of numbers, **set-builder notation** and **interval notation**.

For example, suppose we want to describe the set of all real numbers less than 10. Using set-builder notation, we write this set as $\{x|x < 10\}$. The graph below shows how we can represent this set on a number line.

The open circle at 10 represents that 10 is not included in the set. The interval that describes this set is called an open infinite interval and is written as $(-\infty, 10)$ when written in interval notation.