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 . Using set-builder notation, we write this set as . The graph below shows how we can represent this set on a number line.

number line with an open circle on 10 and the number line shaded to the left of 10. 

The open circle at represents that is not included in the set. The interval that describes this set is called an open infinite interval and is written as  when written in interval notation.