

Unit 1 Day 1 – Interval Notation, Domain, & Range

A **closed circle** means the value *IS* included, so we use _____.

An **open circle** means the value *IS NOT* included, so we use _____.

Write each inequality in interval notation.

1. $x \geq -3$

2. $x < 8$

3. $-2 < x \leq 5$

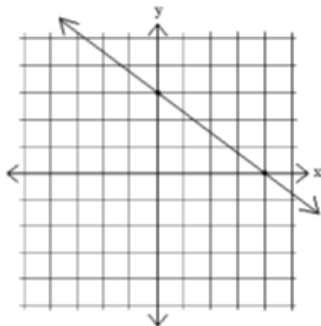
4. $0 \leq x \leq 10$

5. $x < -2$ and $x \geq 3$

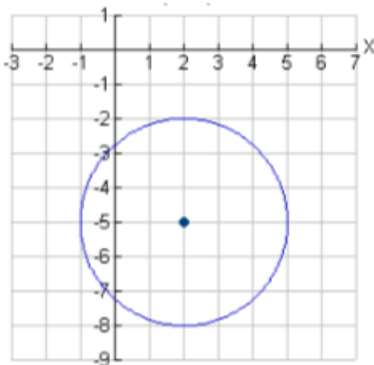
6. $-8 \leq x < -1$ and $x \geq 4$

Find the domain and range of each.

1.



2.



Find the domain and range of each function.

3. $x^2 - 4x - 4$

4. $x^3 - 2$

5. $-|x - 2| + 3$

6. $\sqrt{x - 3} + 1$

7. 2^x

8. $\log x$