

3-3 B Interval Notation

- _____ 1. In interval notation, what is $x > 3$?
A. $(3, \infty)$ B. $[3, \infty)$ C. $(-\infty, 3)$ D. $(-\infty, 3]$
- _____ 2. In interval notation, what is $x < 3$?
A. $(3, \infty)$ B. $[3, \infty)$ C. $(-\infty, 3)$ D. $(-\infty, 3]$
- _____ 3. In interval notation, what is $x \leq 3$?
A. $(3, \infty)$ B. $[3, \infty)$ C. $(-\infty, 3)$ D. $(-\infty, 3]$
- _____ 4. In interval notation, what is $2 < x \leq 5$?
A. $(2, 5)$ B. $[2, 5)$ C. $[2, 5]$ D. $(2, 5]$
- _____ 5. What would represent the interval notation of $[-8, \infty)$?
A. $x < -8$ B. $x > -8$ C. $x \leq -8$ D. $x \geq -8$

3-4 Composition of Functions

Let $f(x) = 2x + 3$ $g(x) = x - 10$ $h(x) = 3x - 1$ $k(x) = x^2$

- _____ 1. Find $f(g(x))$
- _____ 2. Find $f(f(x))$
- _____ 3. Find $k(g(x))$
- _____ 4. Find $h(g(x))$
- _____ 5. Find $f(k(x))$