

## Set Notation

**Write in set notation. Try to use more than one notation for each one.**

1. The set of integers greater than -2.
2. The set of integers between and including 1 and 5.
3. The set of real numbers greater than -2.
4. The set of real numbers between and including 1 and 5.

**Write in interval notation.**

5.  $\{x \mid x \leq -5\}$
6.  $\{x \mid x > 3\}$
7.  $\{x \mid -4 < x \leq 5\}$

**Write in set builder notation.**

8.  $(-2, 3]$
9.  $(-\infty, 4]$
10.  $(-1, \infty)$

## SOLUTIONS

**Write in set notation. Try to use more than one notation for each one.**

1.  $\{-1, 0, 1, 2, 3, \dots\}$  or  $\{x \mid x > -2, \text{ where } x \text{ is an integer}\}$
2.  $\{1, 2, 3, 4, 5\}$  or  $\{x \mid 1 \leq x \leq 5, \text{ where } x \text{ is an integer}\}$
3.  $\{x \mid x > -2\}$  or  $(-2, \infty)$
4.  $\{x \mid 1 \leq x \leq 5\}$  or  $[1, 5]$

**Write in interval notation.**

5.  $(-\infty, 5]$
6.  $(3, \infty)$
7.  $(-4, 5]$

**Write in set builder notation.**

8.  $\{x \mid -2 < x \leq 3\}$
9.  $\{x \mid x \leq 4\}$
10.  $\{x \mid x > -1\}$