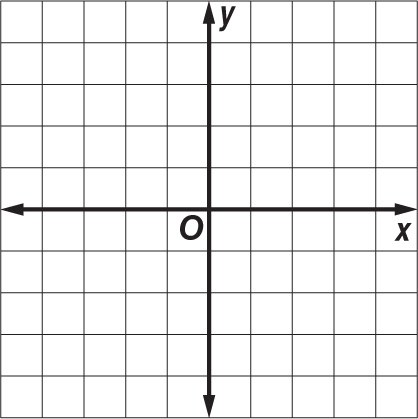
**6-6 Notes: *Systems of Inequalities***

* The solution of a **system of inequalities** is:

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

* When graphing a system of inequalities, the solution is:

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

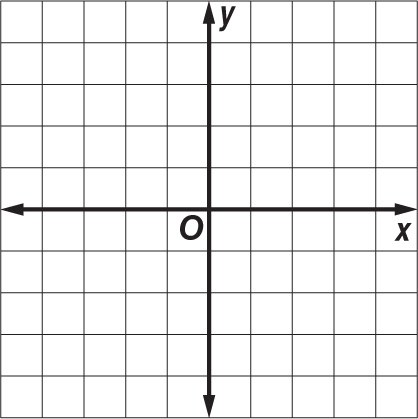


**Example 1: Solve the system of inequalities by graphing.**

***y* > *x* + 2**

***y* ≤ –2*x* – 1**

**Example 2: Solve the system of inequalities by graphing.**

***x* + *y* > 4**

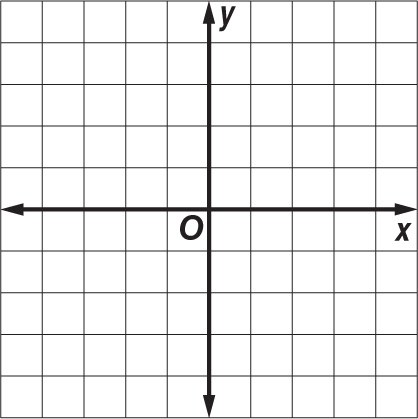
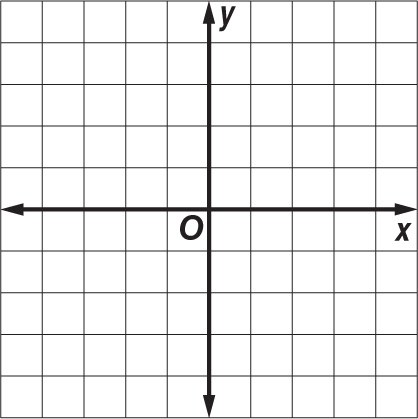
***x* + *y* < –1**

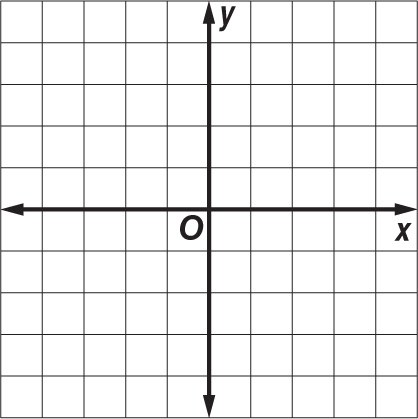
**Exercises**

**Solve each system of inequalities by graphing.**

**1.** *y* > –1 **2.** *y* > –2*x* + 2 **3.** *y* < *x* + 1

*x* < 0 *y* ≤ *x* + 1 3*x* + 4*y* ≥ 12





**4.** 2*x* + *y* ≥ 1 **5.** *y* ≤ 2*x* + 3 **6.** 5*x* – 2*y* < 6

*x* – *y* ≥ –2 *y* ≥ –1 + 2*x y* > –*x* + 1

