**9-7 Skills Practice**

***Solving Linear-Nonlinear Systems***

**Solve each system of equations algebraically.**

**1.** *y* = *x* – 2 **2.** *y* = 3*x*

*y* = – 2 *x* =

**3.** *y* = *x* **4.** *y* = 7

+ = 4 + = 9

**5.** *y* = –2*x* + 2 **6.** *y* = 2 – *x*

= 2*x y* = – 4*x* + 2

**7.** *y* = *x* – 1 8**.** *y* = + 1

*y* = *y* = – + 3

**9.** *y* = 4*x*  **10.** 4 + 9 = 36

4 + = 20 – 9 = 9

**11.** 3 – 4 = 12 12**.**  – 4 = 4

*y* = –2*x* + 2 *y* = 2*x*

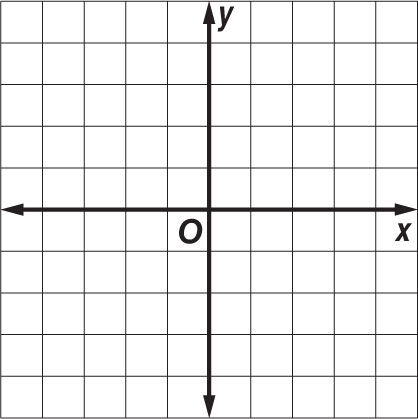
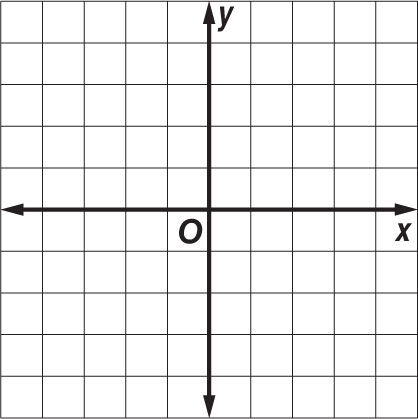
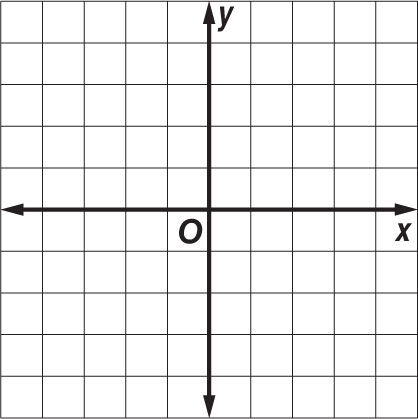
**9-7 Skills Practice**

***Solving Linear-Nonlinear Systems***

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

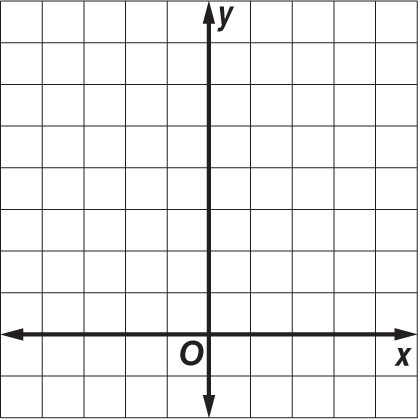
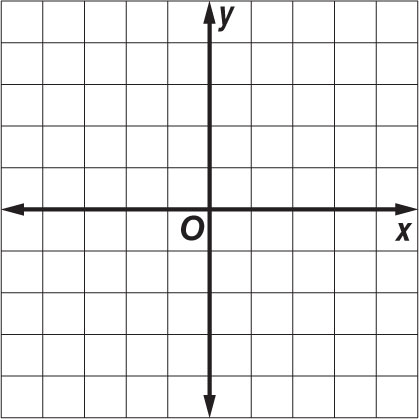
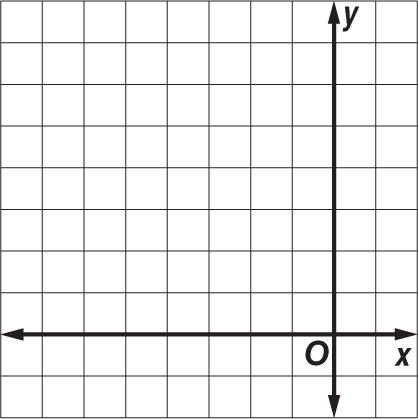
**1.** *y* ≤ 3*x* – 2 **2.** *y* ≤ *x* **3.** 4 + 9 < 144

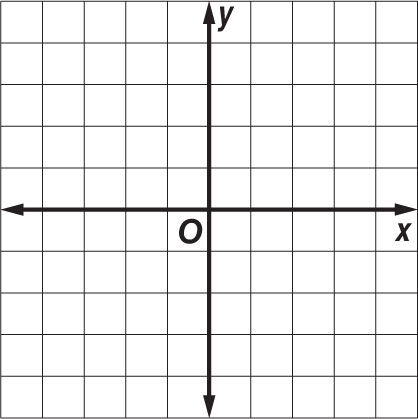
+ < 16 *y* ≥ –2 + 4 + 8 < 16



**4.** *y* ≥ **5.**  + < 36 **6.**  + ≤ 1

*y* > –*x* + 2 + ≥ 16 + ≤ 4



**7. GARDENING** An elliptical garden bed has a path from point *A* to point *B*. If the

bed can be modeled by the equation + 3 = 12 and the path can be modeled by

the line *y* = – *x*, what are the coordinates of points *A* and *B*?