

# 7 CHAPTER REVIEW

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• Multi-Language Visual Glossary  
• Vocabulary practice

## REVIEW KEY VOCABULARY

- system of linear equations, p. 376
- solution of a system of linear equations, p. 376
- consistent independent system, p. 376
- inconsistent system, p. 405
- consistent dependent system, p. 405
- uniform motion, p. 413
- linear inequality in two variables, p. 425
- solution of an inequality in two variables, p. 425
- graph of an inequality in two variables, p. 425
- half-plane, p. 425
- system of linear inequalities, p. 433
- solution of a system of linear inequalities, p. 433
- graph of a system of linear inequalities, p. 433

## VOCABULARY EXERCISES

1. Copy and complete: A(n)   ?   consists of two or more linear inequalities in the same variables.
2. **NOTETAKING SKILLS** Make a case diagram like the one on page 374 for the possible numbers of solutions of a system of linear inequalities.
3. Give an example of a consistent dependent system. *Explain* why the system is a consistent dependent system.

## REVIEW EXAMPLES AND EXERCISES

Use the review examples and exercises below to check your understanding of the concepts you have learned in each lesson of Chapter 7.

### 7.1 Solve Linear Systems by Graphing

pp. 376–381

Alg. 9.0

#### EXAMPLE

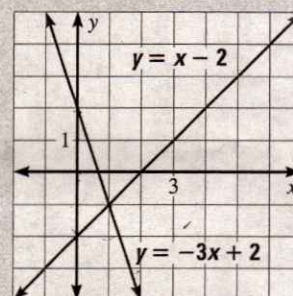
Solve the linear system by graphing. Check your solution.

$$y = x - 2 \quad \text{Equation 1}$$

$$y = -3x + 2 \quad \text{Equation 2}$$

Graph both equations. The lines appear to intersect at  $(1, -1)$ . Check the solution by substituting 1 for  $x$  and  $-1$  for  $y$  in each equation.

$y = x - 2$	$y = -3x + 2$
$-1 \stackrel{?}{=} 1 - 2$	$-1 \stackrel{?}{=} -3(1) + 2$
$-1 = -1 \checkmark$	$-1 = -1 \checkmark$



#### EXERCISES

Solve the linear system by graphing. Check your solution.

$$\begin{aligned} 4. \quad y &= -3x + 1 - 2 \\ y &= x - 7 \end{aligned}$$

$$\begin{aligned} 5. \quad y &= 3x + 4 \\ y &= -2x - 1 \end{aligned}$$

$$\begin{aligned} 6. \quad x + y &= 3 \\ x - y &= 5 \end{aligned}$$

**EXAMPLES**  
**1 and 2**

on pp. 376–377  
for Exs. 4–6

**EXA**  
**1, 2,**

on p.  
for E