

EXAMPLE 1

on p. 376
for Exs. 6–11

6. **MULTIPLE CHOICE** Which ordered pair is a solution of the linear system $x + y = -2$ and $7x - 4y = 8$?

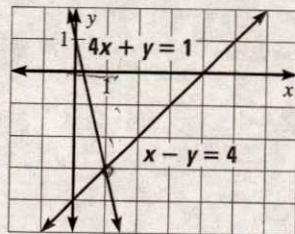
(A) $(-2, 0)$ (B) $(0, -2)$ (C) $(2, 0)$ (D) $(0, 2)$

7. **MULTIPLE CHOICE** Which ordered pair is a solution of the linear system $2x + 3y = 12$ and $10x + 3y = -12$?

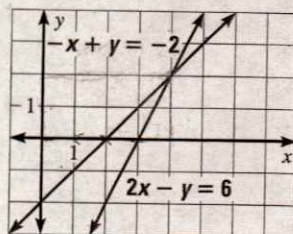
(A) $(-3, 3)$ (B) $(-3, 6)$ (C) $(3, 3)$ (D) $(3, 6)$

SOLVING SYSTEMS GRAPHICALLY Use the graph to solve the linear system. Check your solution.

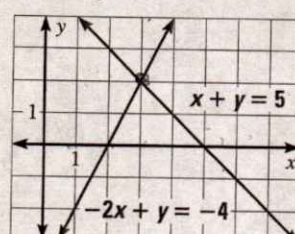
8. $x - y = 4$
 $4x + y = 1$



9. $-x + y = -2$
 $2x - y = 6$

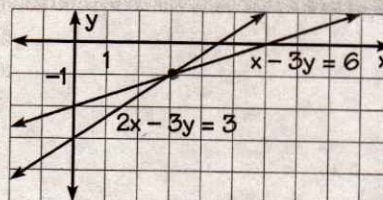


10. $x + y = 5$
 $-2x + y = -4$



11. **ERROR ANALYSIS** Describe and correct the error in solving the linear system below.

$x - 3y = 6$ Equation 1
 $2x - 3y = 3$ Equation 2



The solution is $(3, -1)$.

**EXAMPLE 2**

on p. 377
for Exs. 12–26

GRAPH-AND-CHECK METHOD Solve the linear system by graphing. Check your solution.

12. $y = -x + 3$
 $y = x + 1$

13. $y = -x + 4$
 $y = 2x - 8$

14. $y = 2x + 2$
 $y = 4x + 6$

15. $x - y = 2$
 $x + y = -8$

16. $x + 2y = 1$
 $-2x + y = 8$

17. $3x + y = 15$
 $y = -15$

18. $2x - 3y = -1$
 $5x + 2y = 26$

19. $6x + y = 37$
 $4x + 2y = 18$

20. $7x + 5y = -3$
 $-9x + y = -11$

21. $6x + 12y = -6$
 $2x + 5y = 0$

22. $2x + y = 9$
 $2x + 3y = 15$

23. $-5x + 3y = 3$
 $4x + 3y = 30$

24. $\frac{3}{4}x + \frac{1}{4}y = \frac{13}{2}$
 $x - \frac{3}{4}y = \frac{13}{2}$

25. $\frac{1}{5}x - \frac{2}{5}y = -\frac{8}{5}$
 $-\frac{3}{4}x + y = 3$

26. $-1.6x - 3.2y = -24$
 $2.6x + 2.6y = 26$

27. **OPEN-ENDED** Find values for m and b so that the system $y = \frac{3}{5}x - 1$ and $y = mx + b$ has $(5, 2)$ as the only solution.

28. **REASONING** Suppose the graphs of the two equations of a linear system have the same slope but different y -intercepts. What conclusion can you make about the system? Explain your reasoning.