5.1 Practice WITH CalcChat® AND CalcView®

GO DIGITAL

In Exercises 1–6, tell whether the ordered pair is a solution of the system of linear equations.

Example 1

1. $(2, 6)$; $x + y = 8$, $3x - y = 0$

2. $(8, 2)$; $x - y = 6$, $2x - 10y = 4$

3. $(-1, 3)$; $y = -7x - 4$, $y = 8x + 5$

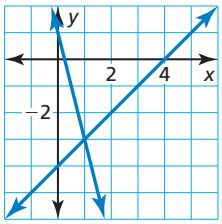
4. $(5, -6)$; $6x + 3y = 12$, $4x + y = 14$

5. $\left(\frac{1}{2}, -2\right)$; $6x + 5y = -7$, $2x - 4y = -8$

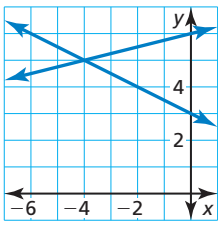
6. $(-2.5, -4)$; $y = 6x + 11$, $2x + y = -9$

In Exercises 7 and 8, use the graph to solve the system. Check your solution.

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



8. $6y + 3x = 18$
$-x + 4y = 24$



In Exercises 9–16, solve the system by graphing.

Example 2

9. $y = -x + 7$
$y = x + 1$

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

11. $y = \frac{1}{3}x + 2$
$y = \frac{2}{3}x + 5$

12. $y = \frac{3}{4}x - 4$
$y = -\frac{1}{2}x + 11$

13. $9x + 3y = -3$
$2x - y = -4$

14. $3y - 9x = 9$
$x + 3y = -6$

15. $4x - 4y = 22$
$y = -5.5$

16. $x - 2y = -\frac{1}{2}$
$-4x - 8y = 2$

MP USING TOOLS In Exercises 17–20, use technology to solve the system.

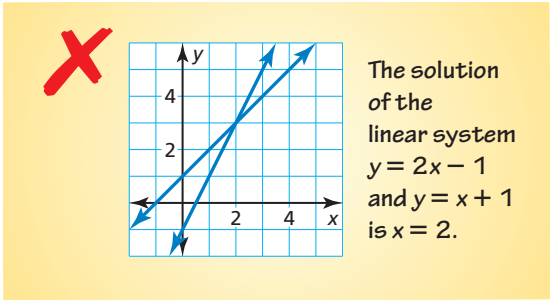
17. $0.2x + 0.4y = 4$
$-0.6x + 0.6y = -3$

18. $-1.6x - 3.2y = -24$
$2.6x + 2.6y = 26$

19. $-7x + 6y = 0$
$0.5x + y = 2$

20. $4x - y = 1.5$
$2x + y = 1.5$

21. ERROR ANALYSIS Describe and correct the error in solving the linear system.



22. COLLEGE PREP You make a total of 16 two-point and three-point shots in a basketball game. You score a total of 35 points. Which system can be used to find the number p of two-point shots and the number q of three-point shots you make? Explain your reasoning.

Ⓐ $p + q = 35$, $2p + 3q = 16$

Ⓑ $p + q = 16$, $2p + 3q = 35$

Ⓒ $p + q = 16$, $3p + 2q = 35$

Ⓓ $p + q = 35$, $16p + 16q = 35$

23. MODELING REAL LIFE You have 40 minutes to exercise at the gym, and you want to burn a total of 300 calories using both machines. How much time should you spend on each machine? *Example 3*

Elliptical Trainer

8 calories per minute

Stationary Bike

6 calories per minute

24. MODELING REAL LIFE You collect \$234 selling small and large smoothies. You sell a total of 46 smoothies. How many of each size did you sell?