Solving Systems of Equation by Substitution
7.2 Practice

Use substitution to solve each system of equations.

1. $y = 4x$
$x + y = 5$

2. $y = 2x$
$x + 3y = -14$

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

4. $x = -4y$
$3x + 2y = 20$

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

6. $x = y - 7$
$x + 8y = 2$

7. $y = 4x - 1$
$y = 2x - 5$

8. $y = 3x + 8$
$5x + 2y = 5$

9. $2x - 3y = 21$
$y = 3 - x$

10. $y = 5x - 8$
$4x + 3y = 33$

11. $x + 2y = 13$
$3x - 5y = 6$

12. $3x - y = 4$
$2x - 10y = 20$

13. $x + 4y = 8$
$2x - 5y = 29$

14. $5x - 2y = 14$
$2x - y = 5$

15. $2x + 5y = 38$
$x - 2y = 1$

16. $x - 4y = 27$
$3x + y = -23$

17. $2x + 2y = 7$
$x - 2y = -1$

18. $2.5x + y = -2$
$3x + 2y = 0$

MOVIE TICKETS For exercises 22 and 23, use the following information.
Tickets to a movie cost \$7.25 for adults and \$5.50 for students. A group of friends purchased 8 tickets for \$52.75.

22. Write and equation to represent the situation.

23. How many adult tickets and students tickets were purchased?