Name _____ Class _____ Date _____

Chapter Test (continued)

Form

Chapter 6

Solve each system using substitution.

8. $y = 5x$
   $y - x = 8$

9. $2x = 3y$
   $x + 2y = 7$

Solve each system using elimination.

10. $5x + 4y = 1$
    $3x - 4y = 7$

11. $x + 2y = 5$
    $3x + y = 10$

Write a system to model each situation. Solve by any method.

12. At the fair, you buy 3 sausage sandwiches and a milkshake and it costs you \$8.25. Your friend buys 1 sausage sandwich and 2 milkshakes and her total is \$5.25. What is the cost of one sandwich and one milkshake?

13. A family goes to a school play. Two adult tickets and 1 student ticket cost \$8.75. Another family needs 1 adult ticket and 4 student tickets. Their total cost was \$10.50. Find the price of each type of ticket.

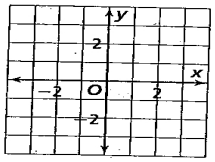
Determine whether point P is a solution of the linear inequality.

14. $y \leq 3x - 1$; $P(2, 4)$

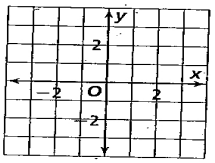
15. $y < \frac{7}{8}x - 3$; $P(1, 0)$

Graph each linear inequality.

16. $y < 4x - 4$



17. $y \geq \frac{1}{3}x + 1$



18. School sweatshirts cost \$8 or \$12 depending on the size (youth or adult). The total amount of money brought in at a Friday morning spirit sale was at most \$216.00. Let x = the number of youth sweatshirts and y = the number of adult sweatshirts.

   a. Write a linear inequality that describes the situation.

   b. Graph the inequality.

   c. Write two possible solutions to the problem.