Name _____ Date _____

Practice 17

For use with Section 3-1

Solve each system by graphing.

1. $y = x - 2$
$y = -x$

2. $y = x + 1$
$y = 0.5x + 2$

3. $x - y = 4$
$y = -3x$

4. $y = 1.5x - 5$
$y = -0.5x + 1$

5. $x - 0.2y = 3$
$y = -x - 3$

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

7. $y = -x + 4$
$y = \frac{1}{3}x - 4$

8. $x - 4y = 12$
$y = x - 3$

9. $x - 2y = -1$
$y = \frac{1}{4}x + 1$

Graph each system of inequalities.

10. $y > -x + 4$
$y \leq 2x - 2$

11. $y \leq -2x + 3$
$2x - y \geq 5$

12. $y < 0.5x + 3$
$x + y > -3$

Graph each system of inequalities. Write the specific name of the shape of the boundary of each solution region.

13. $-1 < x < 2.5$
$1 < y < 3.5$

14. $x \leq 4$
$x \geq 1$
$y \leq x$
$y \geq -x - 1$

15. $y \leq x + 2$
$y \geq x - 1$
$y \leq -x + 1$
$y \geq -x - 2$

16. Jung Mee is planning a summer vacation trip that includes 600 miles of driving per week. If she rents a car at U-Drive-It Rent-a-Car, she will pay \$130 per week. At FastLane Rent-a-Car there is a one-time charge of \$280 plus \$.15 per mile.

a. Let w be the number of weeks that Jung Mee drives. Write an equation for the cost of renting a car from U-Drive-It.

b. Write an equation for the cost of renting from FastLane.

c. Solve the system by graphing.

d. Based on the graph, how should Jung Mee decide between the two companies?

17. TCI charges \$.35 for the first minute of a certain call and \$.15 per minute for each additional minute. FiberNet charges \$.80 for the first minute and \$.10 per minute for each additional minute. Let m be the number of minutes after the first minute. Write equations for the cost of calls with the two companies, and graph your equations. For what number of additional minutes will the two calls cost the same amount?