

Name _____

5-7B Lesson Master

Questions on SPUR Objectives
See Student Edition pages 367–371 for objectives.

VOCABULARY

- Fill in the Blanks** When a line is drawn in a plane, the line separates the plane into two distinct regions called _____. The line itself is called the _____.

REPRESENTATIONS Objective J

- Matching** The inequality $ax + by \leq c$ is graphed at the right. Match each point identified on the graph with the sentence it satisfies.

P _____

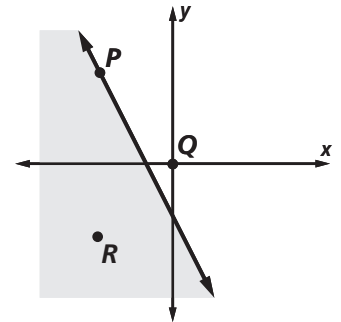
A $ax + by > c$

Q _____

B $ax + by = c$

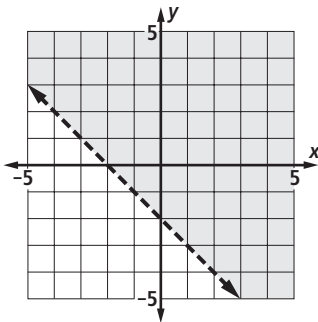
R _____

C $ax + by < c$

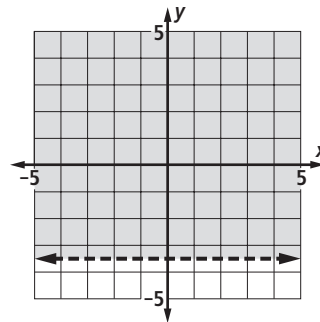


In 3–6, write an inequality that describes the shaded region of the graph.

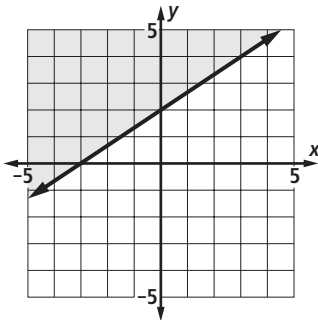
3.



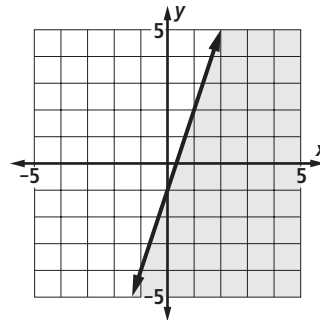
4.



5.



6.



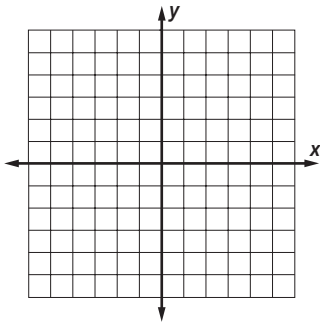
Name _____

5-7B

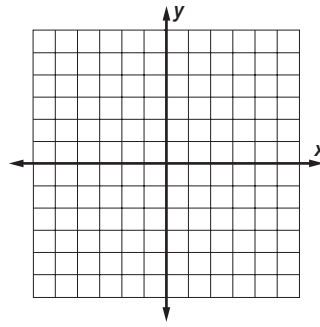
page 2

In 7-10, graph the inequality on the coordinate plane.

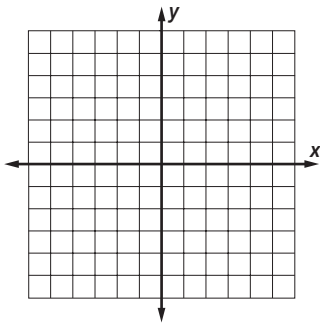
7. $x < -2.5$



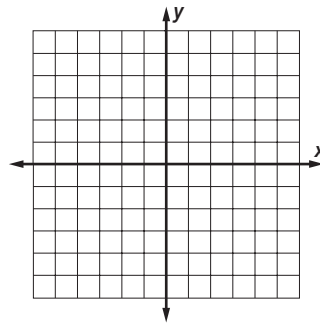
8. $y \geq 7$



9. $y \geq -2x - 3$



10. $-2x - 3y > 9$



In 11 and 12, the I.M. Sweet bakery sells chocolate chip cookies and plain oatmeal cookies for \$1.75 a dozen. Connie has \$7 to spend on cookies.

11. At the right, graph the possible combinations of chocolate chip cookies and plain oatmeal cookies she can afford.

12. Determine whether she can buy each combination.

a. 3 dozen plain and 3 dozen chocolate chip

b. 1 dozen plain and 3 dozen chocolate chip

c. 4 dozen plain and 2 dozen chocolate chip

