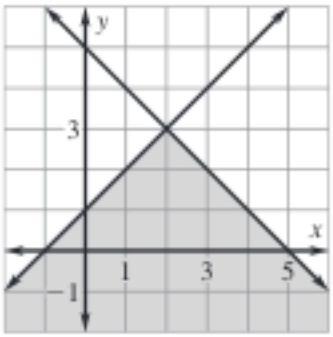
Algebra I

Worksheet 6.6

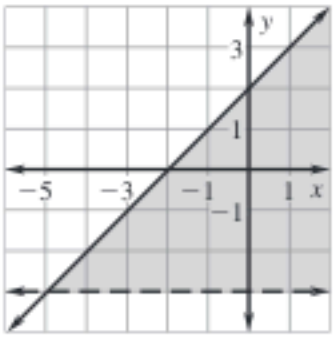
Name _____

Tell whether the ordered pair is a solution of the system of inequalities.

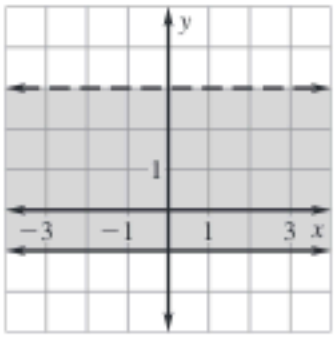
1. $(2, 1)$



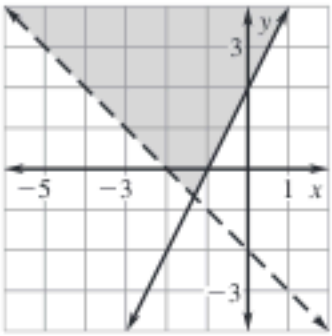
2. $(-3, 2)$



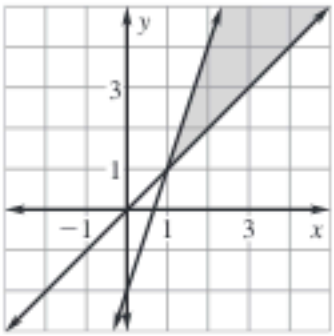
3. $(0, -1)$



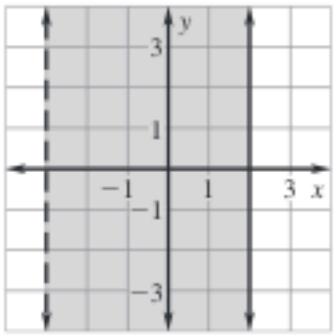
4. $(-2, 0)$



5. $(2, 4)$



6. $(-2, 3)$



Match the system of inequalities with its graph.

7. $x + y \geq 4$
$x < 2$

8. $x + y \leq 4$
$x < -2$

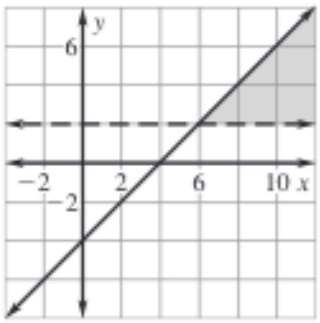
9. $x - y \geq 4$
$y > 2$

10. $y + x \leq 4$
$y < 2$

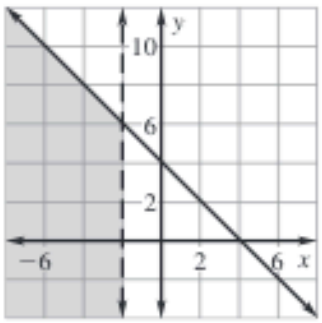
11. $x - y \leq 4$
$x > -2$

12. $y + x \geq 4$
$y < -2$

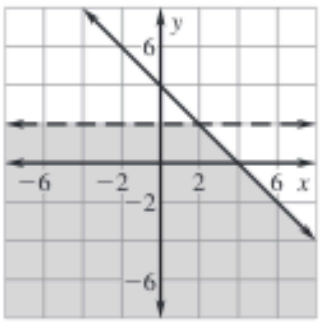
A.



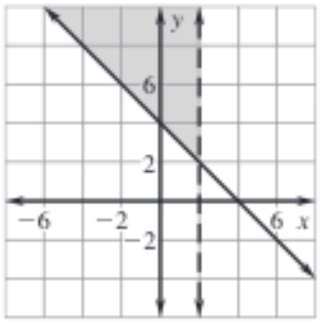
B.



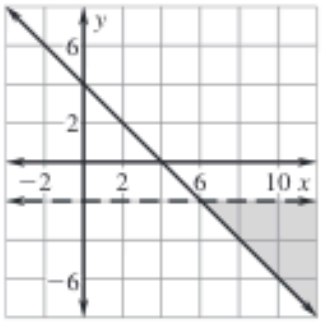
C.



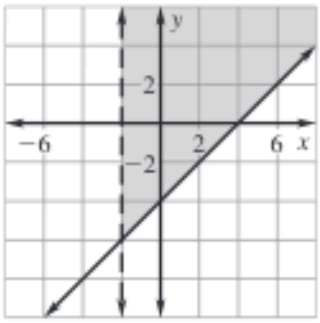
D.



E.

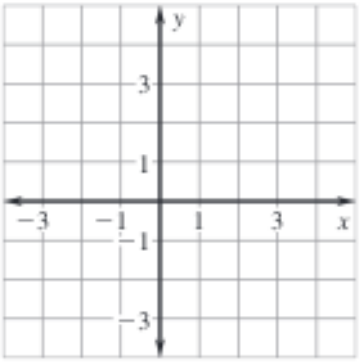


F.

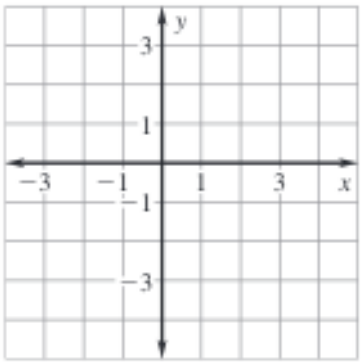


Graph the system of inequalities.

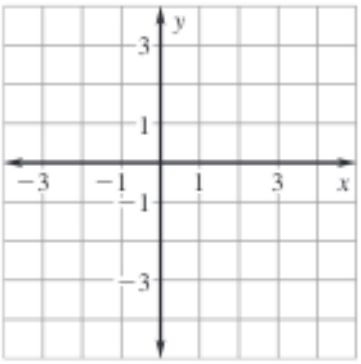
13. $x > -1$
$x < 4$



14. $y > -3$
$y \leq 0$

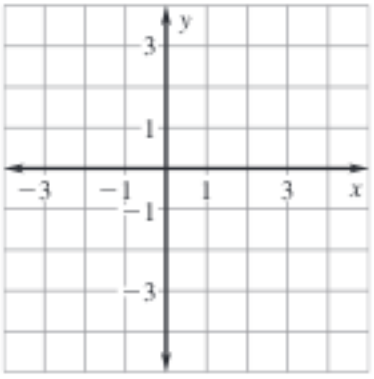


15. $x \geq 2$
$y > 0$



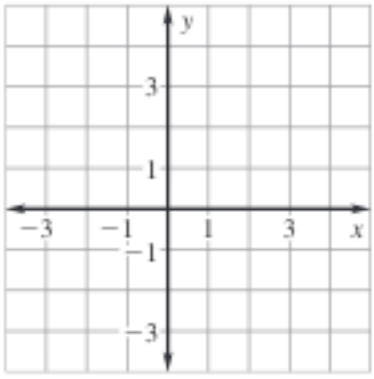
16. $x < 1$

$y \leq -2$



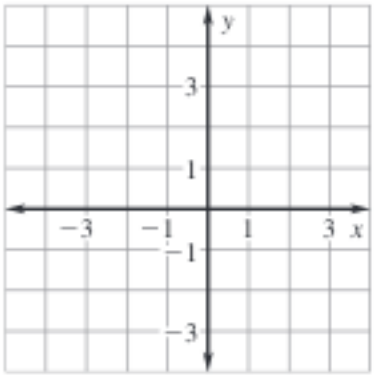
17. $x > 0$

$y \leq x$



18. $y \leq 3$

$y > -x$



19. Ordering Cups You work at an Italian ice shop during the summer. You need to order 5-ounce and 8-ounce cups. The storage room will only hold 10 more boxes of cups. A box of 5-ounce cups costs \$15 and a box of 8-ounce cups costs \$18. A maximum of \$90 is budgeted for cups.

a. Let x represent the number of boxes of 5-ounce cups and let y represent the number of boxes of 8-ounce cups. Write a system of linear inequalities for the number of cups that can be bought.

b. Graph the system of inequalities.

c. Identify two possible combinations of cups you can buy.