

Worksheet 7.6 – Solving Systems of Linear Inequalities – Textbook pages 432-438

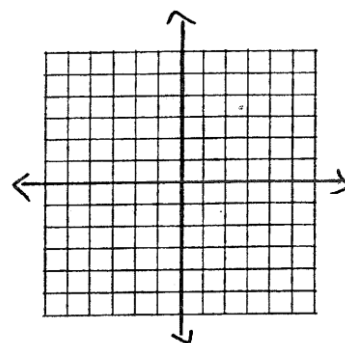
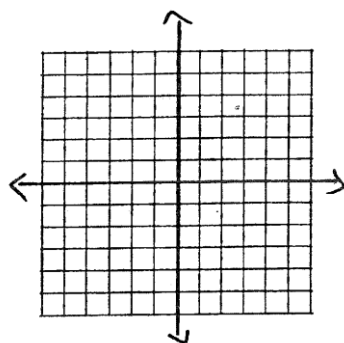
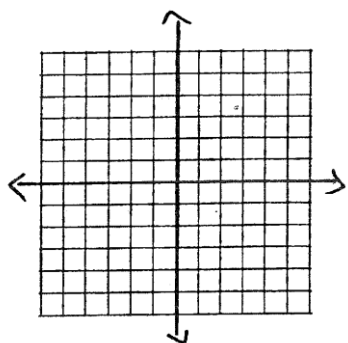
Graph the system of linear inequalities.

LEVEL 1

1) $x \geq 3$
 $y < -2$

2) $y > 2x - 5$
 $y \leq -4x + 1$

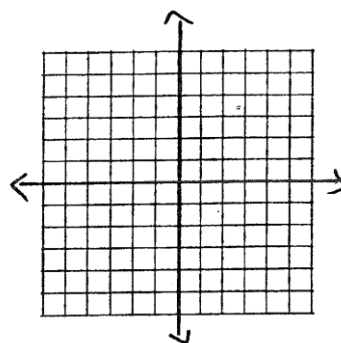
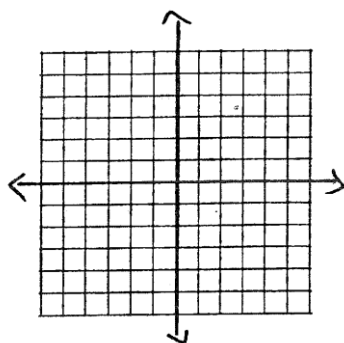
3) $y < -x + 3$
 $y > 3x$



LEVEL 2

4) $3x - 6y > 9$
 $3x - y \geq 2$

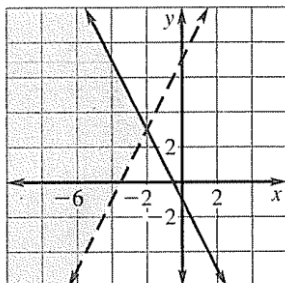
5) $2x + 3y < 6$
 $2x + 3y > -9$



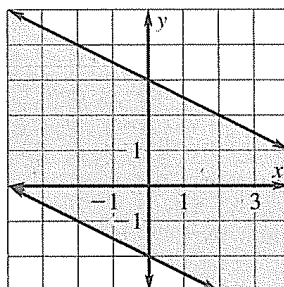
LEVEL 3

Write a system of linear inequalities that define the shaded region

6)

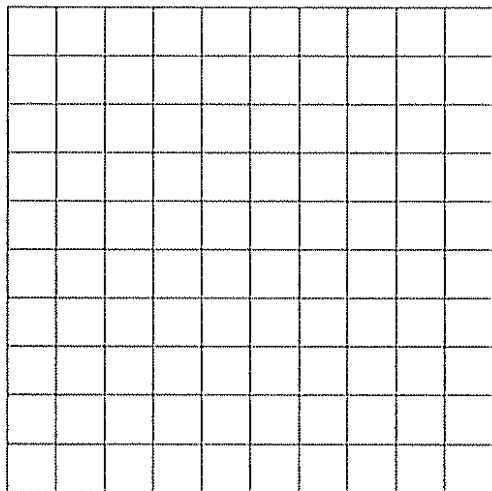


7)



LEVEL 4

8) You need at least 3 hours to do your science and math homework. It is 12:30pm on Sunday and your friends wants you to go to the movies at 7:00pm. Write a system of linear inequalities that shows the number of hours you could spend doing homework for each subject if you go to the movies. Graph the results.



9. You work at a frozen yogurt shop during the summer. You need to order 6-ounce and 10-ounce cups. The storage room will only hold 15 more boxes. A box of 6-ounce cups costs \$100 and a box of 10-ounce cups costs \$150. A maximum of \$1900 is budgeted for yogurt cups. Write a system of linear inequalities that shows the number of boxes of 6-ounce and 10-ounce cups that could be bought. Graph your results.

