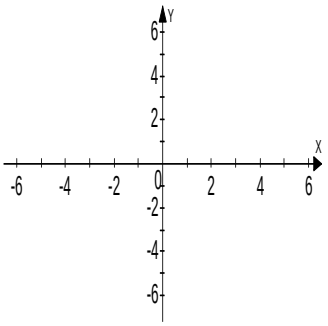
Name _____ Date _____

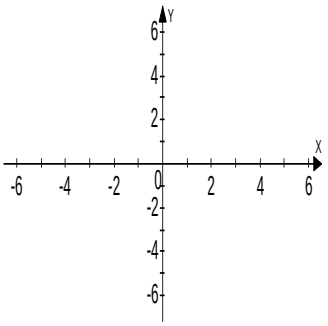
Additional Exercises 5.5
Form I
Systems of linear Inequalities

Graph the system of inequalities. Indicate the solution by shading.

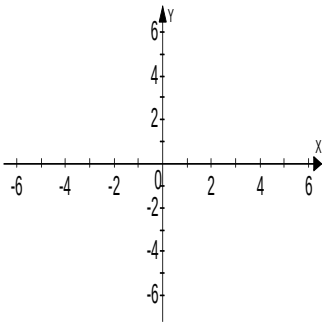
1. $y > 4x - 3$
   $y < -\frac{1}{3}x + 2$



2. $y \geq -\frac{3}{4}x + 5$
   $y > -1$

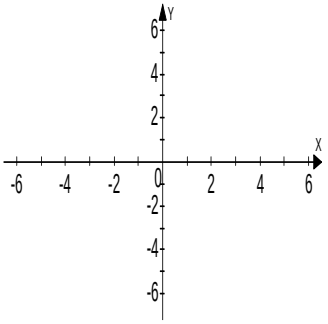


3. $x + y \geq 2$
   $x - y \leq 4$

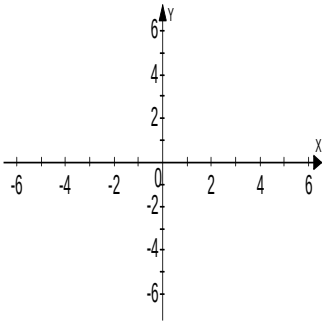


Name _____ Date _____

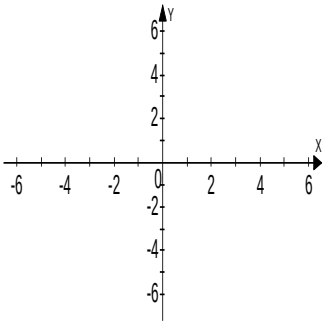
4. $2x + y \leq 4$
$x - 1 > 0$



5. $x - 2y > 6$
$4x - y \leq -4$

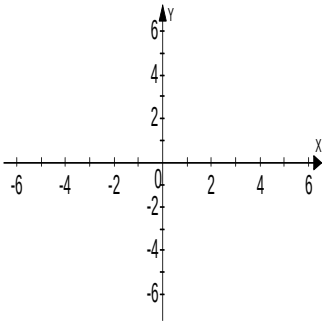


6. $x < -4$
$y < -2$

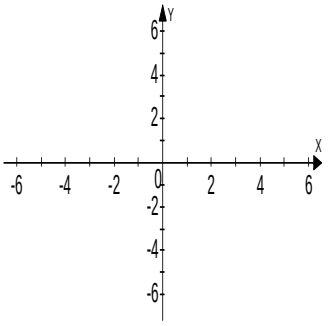


Name _____ Date _____

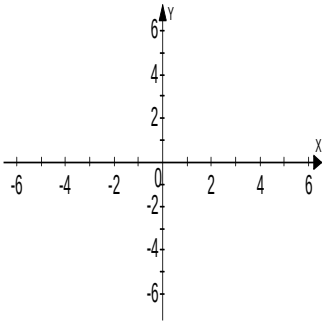
7. $y < 3x - 1$
$2x + y > 0$



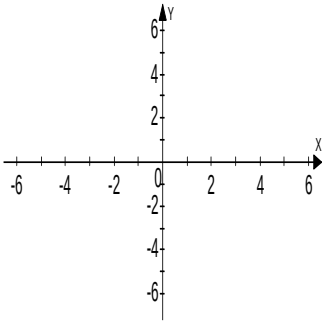
8. $x - y > 4$
$x + y > 4$



9. $y \leq 3$
$y \geq -3$



10. $3x - 2y \leq -2$
$2x + y \geq 5$

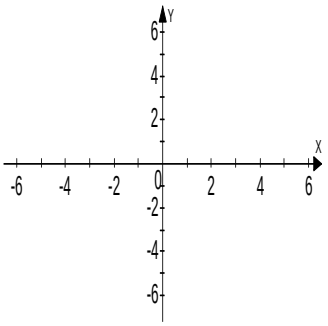


Name _____ Date _____

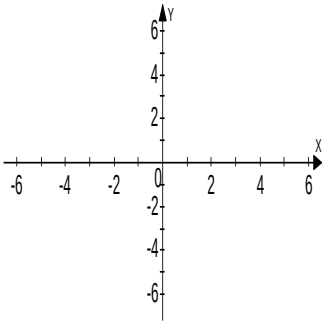
Additional Exercises 5.5
Form II
Systems of linear Inequalities

Graph the system of inequalities. Indicate the solution by shading.

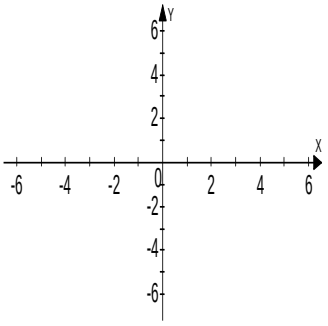
1. $y \geq \frac{1}{3}x - 6$
   $y \leq 4x + 2$



2. $y < \frac{3}{4}x$
   $y < -\frac{1}{2}x - 1$



3. $x \geq 3$
   $y \geq 3$



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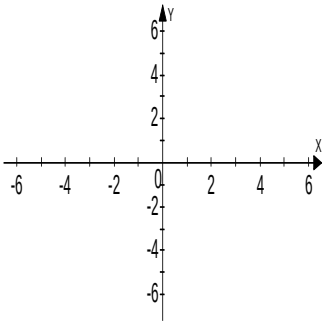
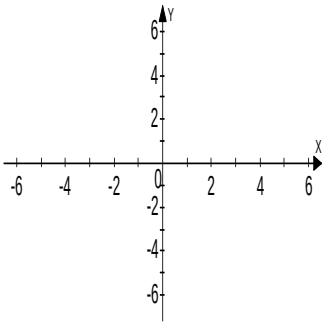
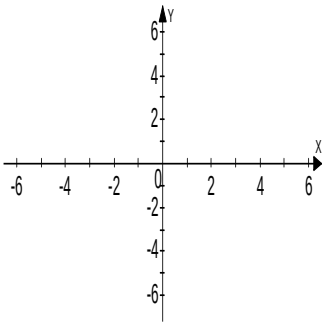
4. $2x + y \geq 4$
$x - 1 > 0$



5. $3x - 2y \geq 6$
$y \leq -3$

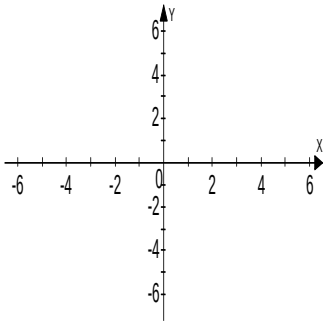


6. $x - 4y \leq 12$
$2x - 4y \geq 8$

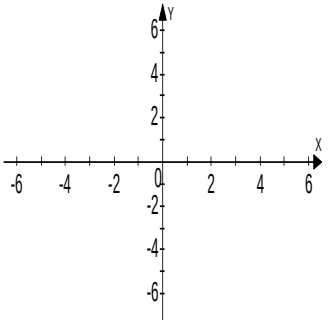


Name _____ Date _____

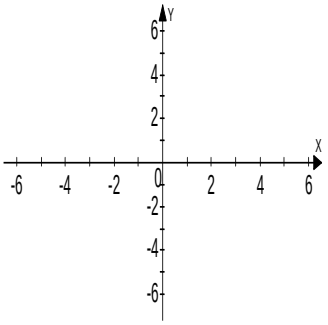
7. $2x + y \geq 2$
$y \leq x - 3$



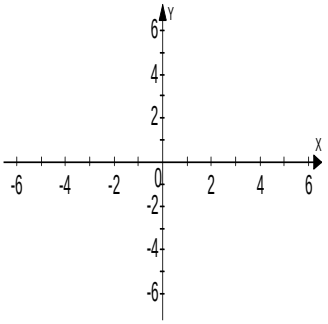
8. $2x + 3y < 6$
$x - 2y < 4$



9. $x > -4$
$y < -3$



10. $5x + 10y < 10$
$3x - 2y > 8$

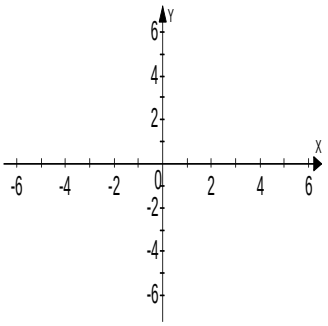


Name _____ Date _____

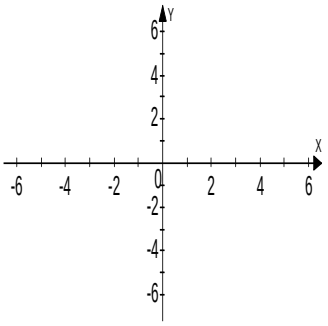
Additional Exercises 5.5
Form III
Systems of linear Inequalities

Graph the system of inequalities. Indicate the solution by shading.

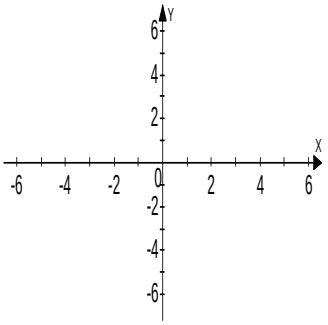
1. $y > -\frac{1}{4}x + 2$
   $y < x$



2. $y < \frac{3}{4}x$
   $x < 3$

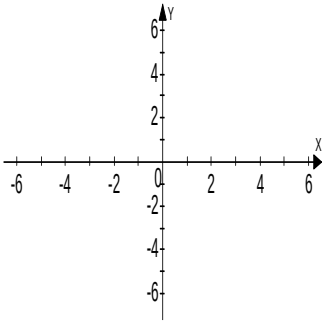


3. $3x + 2y \geq -6$
   $3x - 2y \leq -10$

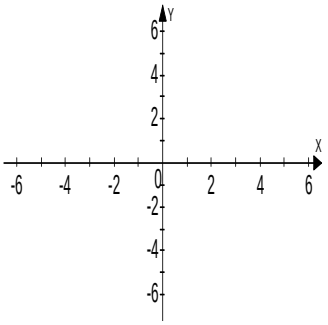


Name _____ Date _____

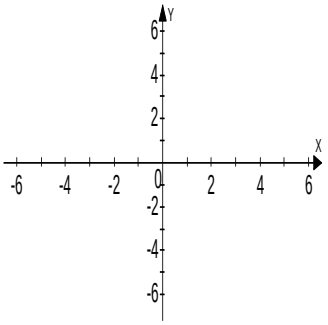
4. $y < 3x - 1$
$y < -2x + 4$



5. $x \leq 3$
$y < -4$

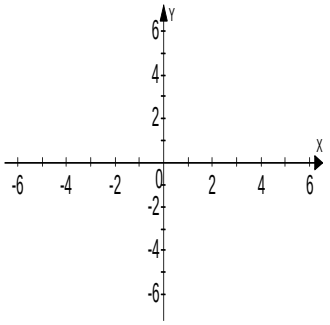


6. $3x + 4y < 16$
$3x - y > 4$

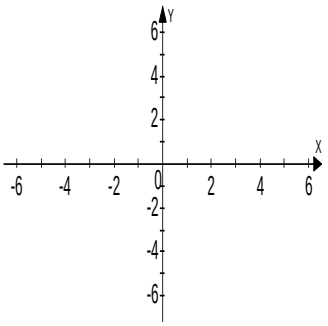


Name _____ Date _____

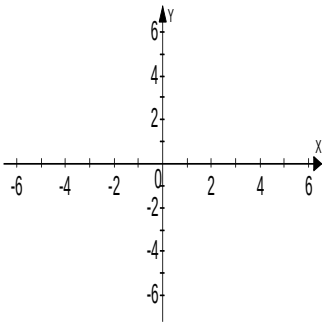
7. $2x - y < -2$
$2x + y < 2$



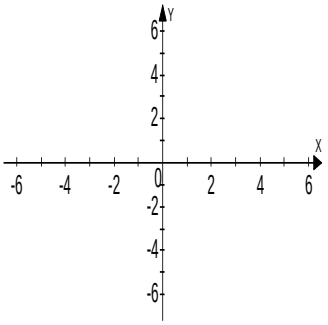
8. $x \leq 3$
$x \geq -1$



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



10. $5x + 3y < 3$
$4x + y > 4$



Name _____ Date _____

11. Mrs. White wants to crochet beach hats and baby afghans for a church fundraising bazaar. She needs 5 hours to make a hat and 6 hours to make an afghan and she has 30 hours available. Thus, $5x + 6y \leq 30$, where x is the number of hats and y is the number of afghans. Can she make 0 hats and 4 afghans in the time allowed? 11. _____

12. An office manager needs to buy new filing cabinets. Cabinet A takes up 7 square feet of floor space. Cabinet B takes up 8 square feet of floor space. The office has room for no more than 56 square feet of cabinets. Thus, $7x + 8y \leq 56$, where x is the number of A cabinets and y is the number of B cabinets. Does the office have enough floor space for 9 A cabinets and 5 B cabinets? 12. _____