Solve Systems of Inequalities Unit Review
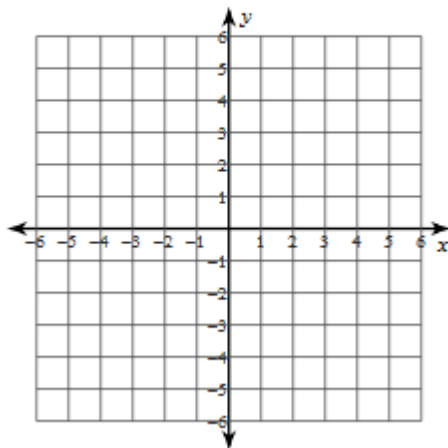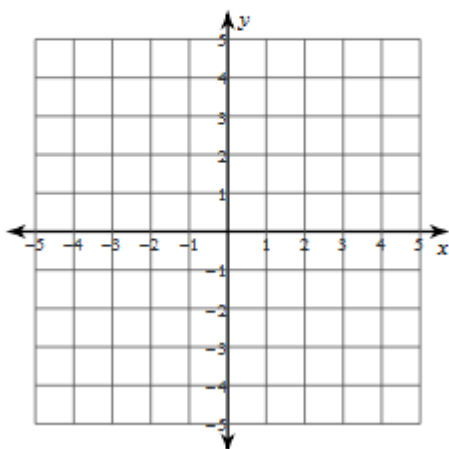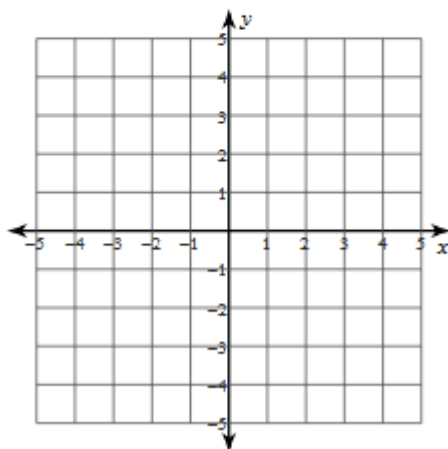
1) $y > -\dfrac{3}{5}x + 2$
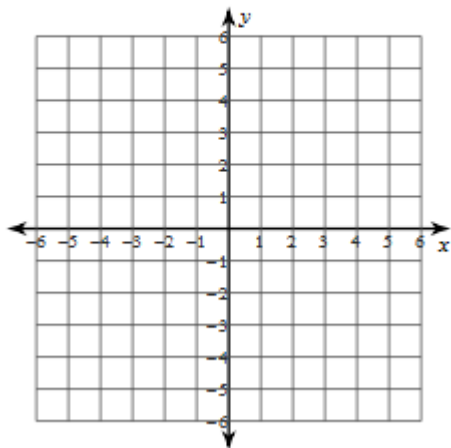
2) $y \leq \dfrac{3}{2}x + 2$

3) $y \leq \dfrac{1}{2}x - 3$

   $y > -2x + 2$
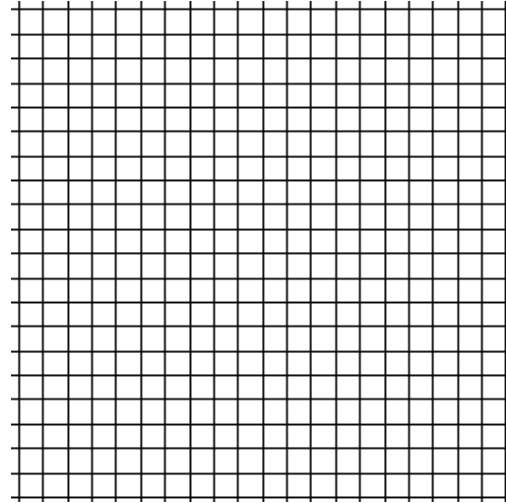
4) $y \leq \dfrac{1}{3}x + 2$

   $y < \dfrac{4}{3}x - 1$

5. You can work at most 20 hours next week. You need to earn at least $92 to cover you weekly expenses. Your dog- walking job pays $7.50 per hour and your job as a car wash attendant pays $6 per hour.

   a. Write a system of linear inequalities to model the situation.
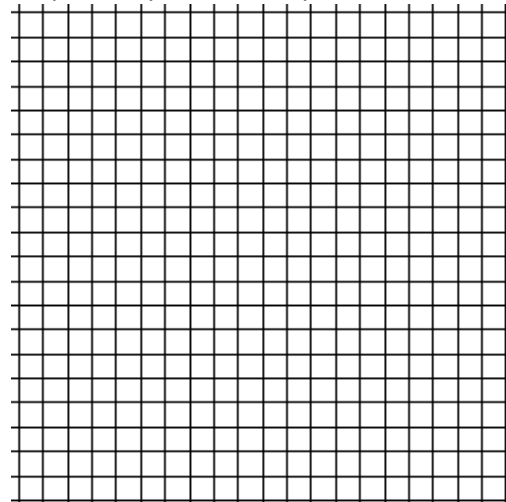
   b. Graph the system of inequalities

   c. Give a possible combination of hours walking dogs and as a car wash attendant.

6. John is doing a fundraiser for school. He needs to sell at least $200 worth of items. Shirts cost $10 each and hats cost $8 each. He must sell more than 12 hats.

   a. Write a system of linear inequalities to model the situation.

   b. Graph the system of inequalities

   c. Give a possible combination shirts and hats that could be sold.