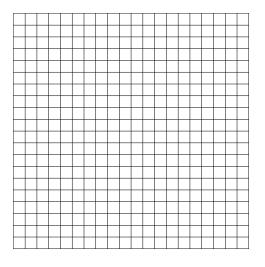
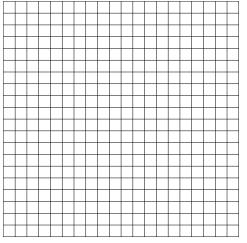
## Systems of Inequalities: Word Problems

Katie has \$50 in a savings account at the beginning of the summer. She wants to have at least \$20 in the account by the end of the summer. She withdraws \$2 each week for food, clothes, and movie tickets. Write an inequality that expresses Katie's situation and display it on the graph below. For how many weeks can Katie withdraw money?

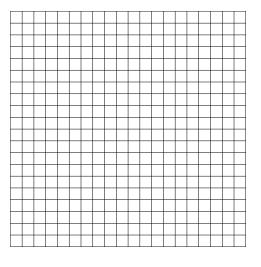


Skate Land charges a \$50 flat fee for a birthday party rental and \$4 for each person. Joann has no more than \$100 to budget for her party. Write an inequality that models her situation and display it on the graph below. How many people can attend

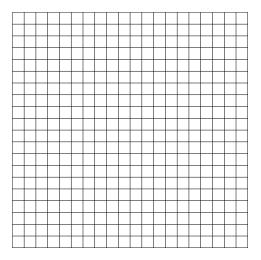
Joann's party?



Sarah is selling bracelets and earrings to make money for summer vacation. The bracelets cost \$2 and the earrings cost \$3. She needs to make at least \$60. Sarah knows she will sell more than 10 bracelets. Write inequalities to represent the income from jewelry sold and number of bracelets sold.



4. Jason is buying wings and hot dogs for a party. One package of wings costs \$8. Hot dogs cost \$5 per pound. He must spend less than \$40. Jason knows he will be buying at least 4 pound of hot dogs. Write a system of inequalities to model the situation. Graph both inequalities and shade the intersection.



5. The boys and girls soccer clubs are trying to raise money for new uniforms. The boys' soccer club is selling cars for \$2 per piece and the girls' soccer club is selling candles for \$4. They must raise more than \$800. The girls expect to sell at least 100 candles. Write a system of inequalities to model the situation. Graph both inequalities and shade the intersection.

