For each problem:

- Define your variables (Let x = , and Let y =)
- Write your equations (are there some totals involving both variables?)
- Use Desmos to solve your system of equations
- What does your solution mean in the context of the problem?
- 1. A theater production charges \$21 for adult tickets and \$15 for student tickets. If the production sold 102 tickets for its opening night and made \$1,932 in ticket sales, how many of each type of ticket were sold?
- 2. The player of a trivia game receives 100 points for each correct answer and loses 25 points for each incorrect answer. Leona answered a total of 30 questions and scored a total of 2125 points. How many questions did she answer correctly?
- 3. At a restaurant the cost for a breakfast taco and a small glass of milk is \$2.10. The cost for 2 tacos and 3 small glasses of milk is \$5.15. How much does a breakfast taco cost? How much does a small glass of milk cost?
- 4. The Frosty Ice Cream Shop sells sundaes for \$2 and banana splits for \$3. On a hot summer day, the shop sold 8 more sundaes than banana splits and made \$156. How many banana splits did they sell?