

Name: \_\_\_\_\_

## Apps of Systems

HW SY – 5



Write and solve (algebraically) a system of equations for each question.

1) Find the value of two numbers if their sum is 12 and their difference is 4.



2) The school that Franklin goes to is selling tickets to a performance. On the first day of ticket sales, the school sold 3 senior citizen tickets and 1 child ticket for a total of \$38. The school took in \$52 on the second day by selling 3 senior citizen tickets and 2 child tickets. Find the price of a senior citizen ticket and the price of a child ticket.

3) Harry, Liam, Niall, Zayn, and Louis are selling fruit for a school fundraiser. Customers can buy small boxes of oranges and large boxes of oranges. Liam sold 3 small boxes of oranges and 14 large boxes of oranges for a total of \$203. Zayn sold 11 small boxes of oranges and 11 large boxes of oranges for a total of \$220. Liam cried when he found out how much Zayn sold. Niall and Harry were arrested for selling bad oranges. Louis didn't sell anything; instead he began a solo career in which he will never write a song and record each track using four vocal coaches and a Macbook. His songs will be downloaded by millions of fans obsessed with British accents and recycled music. The Doctor told me so. Find the cost of one small box and one large box of oranges.