### 6.4 Applications for Systems of Equations

## You must: 1) identify your variables, 2) write a system to model the problem, and 3) solve the system and 4) give the answer to the problem.

1) Trevon and Jose each improved their yards by planting hostas and ornamental grass. They bought their supplies from the same store. Trevon spent $\$ 62$ on 3 hostas and 10 bunches of ornamental grass. Jose spent $\$ 57$ on 3 hostas and 9 bunches of ornamental grass. What is the cost of one hosta and the cost of one bunch of ornamental grass?
2) The senior classes at High School A and High School B planned separate trips to the county fair. The senior class at High School A rented and filled 8 vans and 2 buses with 178 students. High School B rented and filled 9 vans and 9 buses with 423 students. Every van had the same number of students in it as did the buses. Find the number of students in each van and in each bus.
3) Julio's school is selling tickets to a spring musical. On the first day of ticket sales the school sold 1 senior citizen ticket and 7 child tickets for a total of $\$ 60$. The school took in $\$ 96$ on the second day by selling 10 senior citizen tickets and 7 child tickets. Find the price of a senior citizen ticket and the price of a child ticket.
4) Ryan and Elisa are selling wrapping paper for a school fundraiser. Customers can buy rolls of plain wrapping paper and rolls of shiny wrapping paper. Ryan sold 10 rolls of plain wrapping paper and 1 roll of shiny wrapping paper for a total of $\$ 61$. Elisa sold 9 rolls of plain wrapping paper and 1 roll of shiny wrapping paper for a total of $\$ 56$. What is the cost each of one roll of plain wrapping paper and one roll of shiny wrapping paper?
