

## Unit 3.4 Practice Applications of linear systems

Period \_\_\_\_\_

- 1) Jennifer and Sumalee are selling wrapping paper for a school fundraiser. Customers can buy rolls of plain wrapping paper and rolls of shiny wrapping paper. Jennifer sold 7 rolls of plain wrapping paper and 7 rolls of shiny wrapping paper for a total of \$189. Sumalee sold 7 rolls of plain wrapping paper and 9 rolls of shiny wrapping paper for a total of \$221. What is the cost each of one roll of plain wrapping paper and one roll of shiny wrapping paper?
  
- 2) Paul and Trevon each improved their yards by planting daylilies and shrubs. They bought their supplies from the same store. Paul spent \$38 on 2 daylilies and 3 shrubs. Trevon spent \$73 on 7 daylilies and 3 shrubs. What is the cost of one daylily and the cost of one shrub?
  
- 3) The school that Maria goes to is selling tickets to the annual talent show. On the first day of ticket sales the school sold 8 senior citizen tickets and 7 student tickets for a total of \$148. The school took in \$108 on the second day by selling 3 senior citizen tickets and 7 student tickets. What is the price each of one senior citizen ticket and one student ticket?
  
- 4) Kathryn and Imani each improved their yards by planting rose bushes and ornamental grass. They bought their supplies from the same store. Kathryn spent \$116 on 10 rose bushes and 4 bunches of ornamental grass. Imani spent \$128 on 10 rose bushes and 7 bunches of ornamental grass. Find the cost of one rose bush and the cost of one bunch of ornamental grass.
  
- 5) Castel and Amanda are selling pies for a school fundraiser. Customers can buy blueberry pies and blackberry pies. Castel sold 10 blueberry pies and 3 blackberry pies for a total of \$123. Amanda sold 10 blueberry pies and 7 blackberry pies for a total of \$167. Find the cost each of one blueberry pie and one blackberry pie.

- 6) The school that Amy goes to is selling tickets to a fall musical. On the first day of ticket sales the school sold 9 senior citizen tickets and 9 child tickets for a total of \$81. The school took in \$85 on the second day by selling 9 senior citizen tickets and 10 child tickets. Find the price of a senior citizen ticket and the price of a child ticket.
- 7) Chelsea and Krystal are selling flower bulbs for a school fundraiser. Customers can buy bags of windflower bulbs and packages of crocus bulbs. Chelsea sold 3 bags of windflower bulbs and 1 package of crocus bulbs for a total of \$38. Krystal sold 3 bags of windflower bulbs and 4 packages of crocus bulbs for a total of \$89. Find the cost each of one bag of windflower bulbs and one package of crocus bulbs.
- 8) The senior classes at High School A and High School B planned separate trips to the water park. The senior class at High School A rented and filled 2 vans and 7 buses with 277 students. High School B rented and filled 9 vans and 7 buses with 340 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.
- 9) The school that Rob goes to is selling tickets to the annual dance competition. On the first day of ticket sales the school sold 8 senior citizen tickets and 2 student tickets for a total of \$126. The school took in \$70 on the second day by selling 4 senior citizen tickets and 2 student tickets. Find the price of a senior citizen ticket and the price of a student ticket.
- 10) The school that Amy goes to is selling tickets to a choral performance. On the first day of ticket sales the school sold 9 senior citizen tickets and 10 student tickets for a total of \$157. The school took in \$105 on the second day by selling 5 senior citizen tickets and 10 student tickets. What is the price each of one senior citizen ticket and one student ticket?