

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?

roll of plain wrapping paper: \$11, roll of shiny wrapping paper: \$16

- 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?

daylily: \$7, shrub: \$8

- 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?

senior citizen ticket: \$8, student ticket: \$12

- 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.

rose bush: \$10, bunch of ornamental grass: \$4

- 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.

blueberry pie: \$9, blackberry pie: \$11

- 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.

senior citizen ticket: \$5, child ticket: \$4

- 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.

bag of windflower bulbs: \$7, package of crocus bulbs: \$17

- 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.

Van: 9, Bus: 37

- 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.

senior citizen ticket: \$14, student ticket: \$7

- 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?

senior citizen ticket: \$13, student ticket: \$4