

Systems Word Problems

Date _____ Period _____

- 1) A boat traveled 64 miles downstream and back. The trip downstream took 4 hours. The trip back took 8 hours. What is the speed of the boat in still water? What is the speed of the current?

- 2) Amy and Bill are selling flower bulbs for a school fundraiser. Customers can buy bags of windflower bulbs and packages of crocus bulbs. Amy sold 2 bags of windflower bulbs and 8 packages of crocus bulbs for a total of \$136. Bill sold 14 bags of windflower bulbs and 4 packages of crocus bulbs for a total of \$120. What is the cost each of one bag of windflower bulbs and one package of crocus bulbs?

- 3) The senior classes at High School A and High School B planned separate trips to Yellowstone National Park. The senior class at High School A rented and filled 13 vans and 8 buses with 589 students. High School B rented and filled 11 vans and 11 buses with 693 students. Every van had the same number of students in it as did the buses. How many students can a van carry? How many students can a bus carry?

- 4) Shayna and Kayla each improved their yards by planting rose bushes and ornamental grass. They bought their supplies from the same store. Shayna spent \$135 on 7 rose bushes and 11 bunches of ornamental grass. Kayla spent \$182 on 14 rose bushes and 14 bunches of ornamental grass. Find the cost of one rose bush and the cost of one bunch of ornamental grass.

- 5) The school that Jacob goes to is selling tickets to the annual dance competition. On the first day of ticket sales the school sold 13 adult tickets and 6 student tickets for a total of \$148. The school took in \$87 on the second day by selling 6 adult tickets and 9 student tickets. Find the price of an adult ticket and the price of a student ticket.

- 6) Rob and Jessica each improved their yards by planting daylilies and ivy. They bought their supplies from the same store. Rob spent \$113 on 9 daylilies and 10 pots of ivy. Jessica spent \$76 on 3 daylilies and 11 pots of ivy. Find the cost of one daylily and the cost of one pot of ivy.

- 7) DeShawn and Carlos each improved their yards by planting daylilies and ivy. They bought their supplies from the same store. DeShawn spent \$143 on 9 daylilies and 8 pots of ivy. Carlos spent \$83 on 9 daylilies and 2 pots of ivy. What is the cost of one daylily and the cost of one pot of ivy?

- 8) Chelsea and Mei each improved their yards by planting grass sod and ivy. They bought their supplies from the same store. Chelsea spent \$250 on 12 ft² of grass sod and 14 pots of ivy. Mei spent \$258 on 13 ft² of grass sod and 14 pots of ivy. Find the cost of one ft² of grass sod and the cost of one pot of ivy.

- 9) Adam and Kali are selling wrapping paper for a school fundraiser. Customers can buy rolls of plain wrapping paper and rolls of shiny wrapping paper. Adam sold 14 rolls of plain wrapping paper and 9 rolls of shiny wrapping paper for a total of \$363. Kali sold 13 rolls of plain wrapping paper and 9 rolls of shiny wrapping paper for a total of \$348. What is the cost each of one roll of plain wrapping paper and one roll of shiny wrapping paper?
- 10) The senior classes at High School A and High School B planned separate trips to the local amusement park. The senior class at High School A rented and filled 10 vans and 9 buses with 431 students. High School B rented and filled 10 vans and 10 buses with 470 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.
- 11) Jose and Kim each improved their yards by planting hostas and ivy. They bought their supplies from the same store. Jose spent \$96 on 14 hostas and 13 pots of ivy. Kim spent \$69 on 9 hostas and 12 pots of ivy. Find the cost of one hosta and the cost of one pot of ivy.
- 12) Shayna and Jasmine each improved their yards by planting grass sod and geraniums. They bought their supplies from the same store. Shayna spent \$51 on 9 ft² of grass sod and 3 geraniums. Jasmine spent \$53 on 12 ft² of grass sod and 1 geranium. Find the cost of one ft² of grass sod and the cost of one geranium.
- 13) Rob and Kali are selling flower bulbs for a school fundraiser. Customers can buy bags of windflower bulbs and packages of crocus bulbs. Rob sold 2 bags of windflower bulbs and 10 packages of crocus bulbs for a total of \$224. Kali sold 2 bags of windflower bulbs and 3 packages of crocus bulbs for a total of \$84. What is the cost each of one bag of windflower bulbs and one package of crocus bulbs?
- 14) The school that Bill goes to is selling tickets to a choral performance. On the first day of ticket sales the school sold 7 senior citizen tickets and 5 student tickets for a total of \$82. The school took in \$116 on the second day by selling 14 senior citizen tickets and 4 student tickets. Find the price of a senior citizen ticket and the price of a student ticket.
- 15) The senior classes at High School A and High School B planned separate trips to Yellowstone National Park. The senior class at High School A rented and filled 10 vans and 2 buses with 206 students. High School B rented and filled 3 vans and 7 buses with 305 students. Each van and each bus carried the same number of students. How many students can a van carry? How many students can a bus carry?
- 16) Sumalee's school is selling tickets to a play. On the first day of ticket sales the school sold 4 adult tickets and 1 child ticket for a total of \$51. The school took in \$107 on the second day by selling 4 adult tickets and 9 child tickets. Find the price of an adult ticket and the price of a child ticket.

- 17) Maria's school is selling tickets to a spring musical. On the first day of ticket sales the school sold 14 senior citizen tickets and 9 child tickets for a total of \$271. The school took in \$176 on the second day by selling 3 senior citizen tickets and 11 child tickets. Find the price of a senior citizen ticket and the price of a child ticket.
- 18) Rob and Molly are selling pies for a school fundraiser. Customers can buy blueberry pies and blackberry pies. Rob sold 7 blueberry pies and 14 blackberry pies for a total of \$238. Molly sold 8 blueberry pies and 7 blackberry pies for a total of \$155. What is the cost each of one blueberry pie and one blackberry pie?
- 19) The school that Paul goes to is selling tickets to a play. On the first day of ticket sales the school sold 14 adult tickets and 14 student tickets for a total of \$378. The school took in \$174 on the second day by selling 2 adult tickets and 12 student tickets. Find the price of an adult ticket and the price of a student ticket.
- 20) Lisa and Krystal each improved their yards by planting grass sod and ivy. They bought their supplies from the same store. Lisa spent \$172 on 13 ft² of grass sod and 14 pots of ivy. Krystal spent \$87 on 6 ft² of grass sod and 9 pots of ivy. Find the cost of one ft² of grass sod and the cost of one pot of ivy.
- 21) Shreya's school is selling tickets to a choral performance. On the first day of ticket sales the school sold 12 senior citizen tickets and 12 student tickets for a total of \$252. The school took in \$112 on the second day by selling 2 senior citizen tickets and 9 student tickets. What is the price each of one senior citizen ticket and one student ticket?
- 22) The school that Totsakan goes to is selling tickets to the annual talent show. On the first day of ticket sales the school sold 11 adult tickets and 6 student tickets for a total of \$227. The school took in \$133 on the second day by selling 7 adult tickets and 3 student tickets. What is the price each of one adult ticket and one student ticket?
- 23) The senior classes at High School A and High School B planned separate trips to the local amusement park. The senior class at High School A rented and filled 8 vans and 1 bus with 165 students. High School B rented and filled 13 vans and 8 buses with 402 students. Each van and each bus carried the same number of students. Find the number of students in each van and in each bus.
- 24) Lisa and Stephanie are selling fruit for a school fundraiser. Customers can buy small boxes of oranges and large boxes of oranges. Lisa sold 12 small boxes of oranges and 2 large boxes of oranges for a total of \$74. Stephanie sold 4 small boxes of oranges and 14 large boxes of oranges for a total of \$118. What is the cost each of one small box of oranges and one large box of oranges?
- 25) Lisa's school is selling tickets to the annual talent show. On the first day of ticket sales the school sold 10 adult tickets and 6 child tickets for a total of \$140. The school took in \$155 on the second day by selling 1 adult ticket and 10 child tickets. Find the price of an adult ticket and the price of a child ticket.