

Systems of Equations Word Problems

- 1) Rob and Dan each improved their yards by planting hostas and ornamental grass. They bought their supplies from the same store. Rob spent \$89 on 2 hostas and 9 bunches of ornamental grass. Dan spent \$73 on 7 hostas and 5 bunches of ornamental grass. What is the cost of one hosta and the cost of one bunch of ornamental grass?
- 2) Jennifer and Cody each improved their yards by planting hostas and ivy. They bought their supplies from the same store. Jennifer spent \$87 on 3 hostas and 11 pots of ivy. Cody spent \$113 on 11 hostas and 6 pots of ivy. What is the cost of one hosta and the cost of one pot of ivy?
- 3) The local amusement park is a popular field trip destination. This year the senior class at High School A and the senior class at High School B both planned trips there. The senior class at High School A rented and filled 4 vans and 1 bus with 97 students. High School B rented and filled 5 vans and 1 bus with 109 students. Each van and each bus carried the same number of students. Find the number of students in each van and in each bus.
- 4) Kristin and Jill are selling wrapping paper for a school fundraiser. Customers can buy rolls of plain wrapping paper and rolls of shiny wrapping paper. Kristin sold 8 rolls of plain wrapping paper and 4 rolls of shiny wrapping paper for a total of \$140. Jill sold 4 rolls of plain wrapping paper and 4 rolls of shiny wrapping paper for a total of \$104. What is the cost each of one roll of plain wrapping paper and one roll of shiny wrapping paper?
- 5) Huong's school is selling tickets to the annual dance competition. On the first day of ticket sales the school sold 12 adult tickets and 13 student tickets for a total of \$310. The school took in \$225 on the second day by selling 9 adult tickets and 9 student tickets. Find the price of an adult ticket and the price of a student ticket.
- 6) 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 11 vans and 3 buses with 245 students. High School B rented and filled 11 vans and 13 buses with 585 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?
- 7) Ryan and Julio each improved their yards by planting grass sod and ivy. They bought their supplies from the same store. Ryan spent \$40 on 5 ft² of grass sod and 5 pots of ivy. Julio spent \$49 on 8 ft² of grass sod and 5 pots of ivy. Find the cost of one ft² of grass sod and the cost of one pot of ivy.
- 8) The sum of the digits of a certain two-digit number is 17. When you reverse its digits you increase the number by 9. What is the number?
- 9) 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 4 vans and 14 buses with 576 students. High School B rented and filled 12 vans and 8 buses with 436 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?

- 10) James and Eduardo each improved their yards by planting hostas and geraniums. They bought their supplies from the same store. James spent \$176 on 3 hostas and 13 geraniums. Eduardo spent \$231 on 8 hostas and 13 geraniums. What is the cost of one hosta and the cost of one geranium?
- 11) 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 3 vans and 11 buses with 263 students. High School B rented and filled 14 vans and 10 buses with 318 students. Each van and each bus carried the same number of students. Find the number of students in each van and in each bus.
- 12) Ted and Nicole are selling fruit for a school fundraiser. Customers can buy small boxes of oranges and large boxes of oranges. Ted sold 13 small boxes of oranges and 7 large boxes of oranges for a total of \$80. Nicole sold 6 small boxes of oranges and 14 large boxes of oranges for a total of \$80. What is the cost each of one small box of oranges and one large box of oranges?
- 13) Beth's school is selling tickets to a choral performance. On the first day of ticket sales the school sold 1 senior citizen ticket and 12 child tickets for a total of \$144. The school took in \$194 on the second day by selling 7 senior citizen tickets and 10 child tickets. Find the price of a senior citizen ticket and the price of a child ticket.
- 14) The school that Brenda goes to is selling tickets to a fall musical. On the first day of ticket sales the school sold 2 adult tickets and 9 child tickets for a total of \$150. The school took in \$292 on the second day by selling 8 adult tickets and 14 child tickets. What is the price each of one adult ticket and one child ticket?
- 15) Jose and Jaidee are selling fruit for a school fundraiser. Customers can buy small boxes of tangerines and large boxes of tangerines. Jose sold 13 small boxes of tangerines and 4 large boxes of tangerines for a total of \$208. Jaidee sold 4 small boxes of tangerines and 13 large boxes of tangerines for a total of \$217. What is the cost each of one small box of tangerines and one large box of tangerines?