

Coordinate Algebra

2.7 Systems of Equations – Word Problems

NOTES

1. A concession stand offers two different soft drink specials. One special has 3 large drinks and 2 medium drinks for \$15. The other has 2 large drinks and 3 medium drinks for \$13.75. Find the cost of a large drink and a medium drink.



2. A sporting goods store is having a sale on soccer balls. A soccer coach purchases 10 soccer balls and 2 bags for \$155. Another soccer coach purchases 12 soccer balls and 3 bags for \$189. Find the cost of a soccer ball and the cost of a bag.



3. A library is having a sale to raise money. Hardcover books cost \$4 each and paperback books cost \$2 each. A person spends \$26 for 8 books. Find the number of hardcover books and the number of paperback books.



4. The chorus class is selling tickets to a choral performance. On the first day of ticket sales the school sold 3 adult tickets and 1 child ticket for a total of \$38. The school took in \$52 on the second day of ticket sales by selling 3 adult tickets and 2 child tickets. Find the price of an adult ticket and the price of a child ticket.



5. A drummer is stocking up on drum sticks and brushes. The wood sticks that he buys are \$10.50 a pair and the brushes are \$24 a pair. He ends up spending \$90 on sticks and brushes and buys two times as many pairs of sticks as brushes. How many pairs of sticks and brushes did he buy?



6. Find the value of two numbers if their sum is 12 and their difference is 4.



7. In a coin bank there are 250 dimes and quarters worth a total of \$39.25. Find how many dimes, d , and how many quarters, q , are in the bank. (Remember: 1 dime = 0.10, 1 quarter = 0.25)

