

SYSTEMS OF EQUATIONS PROBLEMS

- 1) Three dictionaries and four books together cost 257 dollars, while four dictionaries and three books together cost 324 dollars. Find the cost of a dictionary.
- 2) The difference between two numbers is 3, and the sum of three times the larger one and twice the smaller one is 19. Find the two numbers.
- 3) A father is 28 years older than his daughter. In 2 years' time he will be three times as old as his daughter. Find their present ages.
- 4) The admission fee at a small fair is \$1.50 for children and \$4.00 for adults. On a certain day, 2,200 people enter the fair, and \$5,050 is collected. How many children and how many adults attended the fair?
- 5) There are 13 animals in a barn. Some are chickens and some are pigs. There are 40 legs in all. How many pigs and how many chickens are there?
- 6) A group of 195 students went on a field trip. They took 7 vehicles, some cars and some buses. Find the number of cars and the number of buses they took if each car held 5 students and each bus held 45 students.
- 7) The school is selling tickets to a choral performance. On the first day of ticket sales the school sold 3 adults' tickets and 1 children's ticket for a total of €38. The school took in €52 on the second day by selling 3 adults' tickets and 2 children's tickets. Find the price of an adults' ticket and the price of a children's ticket.
- 8) A test has twenty questions worth 100 points. The test consists of some true/false questions worth 3 points each, and some multiple choice questions worth 11 points each. How many multiple choice questions are there on the test?
- 9) The Lakers scored a total of 80 points in a basketball game against the Bulls. The Lakers made a total of 37 two-point and three-point baskets. How many two-point shots did the Lakers make? How many three-point shots did the Lakers make?
- 10) A company employs 60 people. Of this amount, 16% of the men wear glasses and 20% of the women also wear glasses. If the total number of people who wear glasses is 11, how many men and women are there in the company?
- 11) In three years' time a pet mouse will be as old as his owner was four years ago. Their present ages add up to a total of 13 years. Find the age of each now.
- 12) A train covers the distance between two cities A and B at 70 km/h in a certain period of time. If it goes 10km/h faster, it will cover the same distance in one hour less. Find the distance between the two cities and the time the first trip takes.
- 13) The perimeter of a rectangle is 24m. The area is 27m^2 . Find its dimensions.