

Word problem part 2

Chickens and rabbits problem

1. There are 35 chickens and rabbits in the same cage. Each chicken has two legs, each rabbit has four legs and there are 100 legs in total in the cage. How many chickens are there in the cage? How many rabbits?

2. There are some chickens and rabbits in the same cage. Their total number is 107. The rabbits in the cage combined have 56 more legs than the chickens in the cage combined. How many chickens are there in the cage? How many rabbits?

3. There are some fantastic beasts gathering on the lawn. They include one-foot birds (which each has 1 head and 1 foot), two-headed dragons (which each has 2 heads and 4feet), three-foot cats (which each has 1 head and 3 feet), and four-foot lizards (which each has 1 head and 4 feet). If there are in total 58 heads and 160 feet on the lawn, and the number of the four-foot lizard is double that of the two-headed dragons. How many one-foot birds are there on the lawn?

Excess and shortage problem

1. Alex and Ben held a concert and distributed tickets to several audiences. If 10 tickets were given to each audience, there would be 28 tickets needed. If 7 tickets were given to each audience, there would be 7 tickets needed. How many audiences are there? How many tickets are there?

2. The school plans to organize students to have an autumn outing. Each coach has 39 seats, and each bus has 27 seats. There are 2 coaches less than buses. If all students and teachers take the coach and there are 2 teachers on each coach, there are 3 seats left.; If all the buses are taken, each bus is full and there is one teacher on each bus, there are 3 teachers left. Then _____ teacher and students will take part in the autumn outing.

Age problem

1. Alex is 7 years old this year, and his mother is 35 years old this year. How old was Alex when his mother was 3 times older than Alex?

2. This year, grandfather is 78 years old, and three grandchildren are 27, 23, and 16 years old. After how many years, grandfather's age is equal to the sum of the three grandchildren's ages?

3. Alex asked Teacher Tian how old he was this year. Teacher Tian said, "When I was your age, my age was 10 times your age. When you were my age, I was 56 years old." How old is Teacher Tian now?

Average problem

1. In Alex's final exam, the average score of Chinese, Mathematics and Nature was 93 points. After the English score was added, the average score rose by 1 point. How much was Alex's English score?

2. In a school, 70 male students and several female students participated in the math contest, with an average score of 63. The average score of male students in the competition is 60 points, and the average score of female students is 70 points. How many female students are there in the school?

Page number problem

1. A book has pages numbered from 1. 810 digits are used to print all these page numbers. How many pages are there in this book?

2. There is a 900-page book. The pages are numbered as 1, 2, 3, ... How many times has the digit "0" appeared in all these page numbers?

Working backwards problem

1. There are certain tons of coal in the warehouse. At first half of the coal is moved out. Next, 450 tons of coal is moved in. Later on, half of the existing coal plus an extra 50 tons is moved out. It turns out that the coal left in the warehouse, if doubled, will be 1200 tons. How many tons of coal is there in the warehouse at the beginning?

2. When Ming was calculating a division equation (which leads to no remainder), he made a mistake and thought the divisor was 15, while the true divisor should be 15. Consequently Ming got a quotient of 24 as the answer. The correct quotient is _____.