

Problem #1

A girl bought a dog for \$10, sold it for \$15, bought it back for \$20, and finally sold it for \$25. Did the girl make or lose money, and how much did she make or lose?

Problem #2

I have 30 coins consisting of nickels and quarters. The total value of the coins is \$4.10. How many of each kind do I have?

Problem #3

Rectangular cards 2 cm by 3 cm are cut from a rectangular sheet 2 metres by 3 metres. What is the greatest number of cards that can be cut from the sheet?

Problem #4

In three bowling games, Alice scores 139, 143, and 144. What score will Alice need in the fourth game in order to have an average score of 145 for all four games?

Problem #5

A book has 500 pages number 1, 2, 3, and so on. How many times does the digit 1 appear in page numbers?

Problem #6

Suppose today is Tuesday. What day of the week will it be 100 days from now?

Problem #7

I have four 3¢ stamps and three 5¢ stamps. Using one or more of these stamps, how many different amounts of postage can I make?

Problem #8

Find the sum of the counting numbers from 1 to 25 inclusive. In other words, if $S = 1 + 2 + 3 + \dots + 24 + 25$, find the value of S

Problem #9

In a stationery store, pencils have one price and pens have another price. Two pencils and three pens cost 78¢. But three pencils and two pens cost 72¢. How much does one pencil cost?

Problem #10

A work crew of 3 people requires 3 weeks and 2 days to do a certain job. How long would it take a work crew of 4 people to do the same job if each person of both crews works at the same rate as each of the others? Note: each week contains 6 work days.

Problem #11

A set of marbles can be divided in equal shares among 2, 3, 4, 5, or 6 children with no marbles left over. What is the least number of marbles that a set could have?

Problem #12

A motorist made a 60 mile trip averaging 20 miles per hour. On the return trip, he averaged 30 miles per hour. What was the motorist's average speed for the entire trip?

Problem #13

The four digit numeral 3AA1 is divisible by 9. What digit does A represent?

Problem #14

If we count by 3s starting with 1, the following sequence is obtained: 1, 4, 7, 10... What is the 100th number in the sequence?

Problem # 15

100 pounds of chocolate is packaged into boxes each containing $1\frac{1}{4}$ pounds of chocolate. Each box is then sold for \$1.75. What is the total selling price for all of the boxes of chocolate?