

Some Puzzlers

1. Each letter in the following message stands for exactly one of the digits from 0 to 9; what are they?

$$\begin{array}{r} \text{SEND} \\ + \text{MORE} \\ \hline \text{MONEY} \end{array}$$

2. The odometer of the family car showed 15951 kilometers. The driver noticed that this number was palindromic; that is, it read the same backward as forward. "Curious," the driver thought to herself. "I wonder how long it will be before that happens again." But 2 hours later, the odometer showed a new palindromic number. How far had the car gone during the 2 hours?

3. What is the sum of all the counting numbers from 1 to 100? What is the sum of the digits in all the counting numbers from 1 to 100?

4. What logical conclusion would Lewis Carroll draw from the following?

Babies are illogical.

Nobody is despised who can manage a crocodile.

Illogical persons are despised.

5. A farmer drove to town to sell a basket of eggs.

To the first customer she sold half her eggs and half an egg.

To the second she sold half of what she had left plus half an egg.

And to a third she sold half of what she then had and half an egg.

Three eggs remained.

She did not break any eggs. How many did she start with?

6. Choose a two-digit number between 50 and 100. Add 76 to the number, producing a three-digit sum. If the digit in the hundreds place is added to the remaining two-digit number and this result is subtracted from the original number, the answer will be 23. Why?

7. A family consisted of 1 grandmother, 1 grandfather, 2 fathers, 2 mothers, 4 children, 3 grandchildren, 1 brother, 2 sisters, 2 sons, 2 daughters, 1 father-in-law, 1 mother-in-law, and 1 daughter-in-law.
What is the smallest possible number of persons in this family?

8. Bob has 10 pockets and 44 silver dollars. He wants to put his dollars into his pockets so distributed that each pocket contains a different number of dollars. Can he do so?

9. Every doodad is a doohickey. Half of all thingamajigs are doohickeys. Half of all doohickeys are doodads. There are 30 thingamajigs and 20 doodads. No thingamajig is a doodad. How many doohickeys are neither doodads nor thingamajigs?

10. Boronoff, Pavlow, Revitsky, and Sukarek are four talented creative artist, one a dancer, one a painter, one a singer, and one a writer. Boronoff and Revitsky were in the audience the night the singer made her debut on the concert stage. Both Pavlow and the writer have sat for portraits by the painter. The writer, whose biography of Sukarek was a best-seller, is planning to write a biography of Boronoff. Boronoff has never heard of Revitsky. What is each person's artistic field?