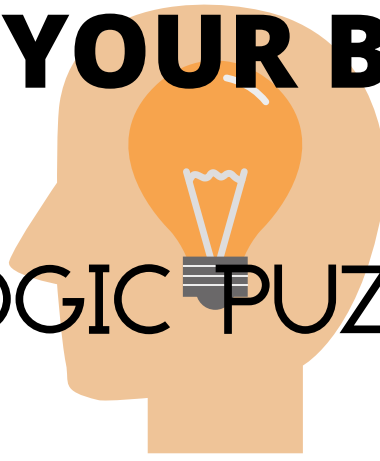# USE YOUR BRAIN

LOGIC PUZZLE

Where Did that Dollar Go?

CAN YOU FIGURE OUT WHERE THE MONEY WENT IN THIS CLASSIC BRAIN TEASER?

The Problem

Three people eating dinner at a restaurant. When they finish the waiter comes and hands them a bill for $30. The three diners decide to split the check evenly and each give the waiter $10. A few minutes later the manager notices that the bill is incorrect and tells the waiter to give the diners $5 in change. The waiter grabs 5 one dollar bills and goes to back to the table. The waiter gives 1 dollar in change to each of the diners and pockets the other two as an extra tip! Let's add all of that up.

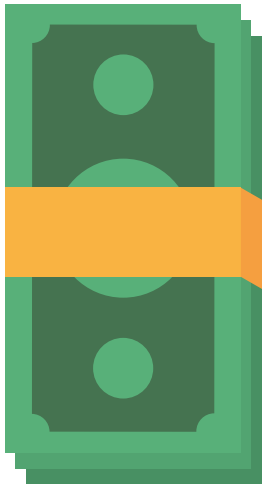Each of the diners ended up paying $9 and the waiter kept $2.

$9+$9+$9+$2=$29
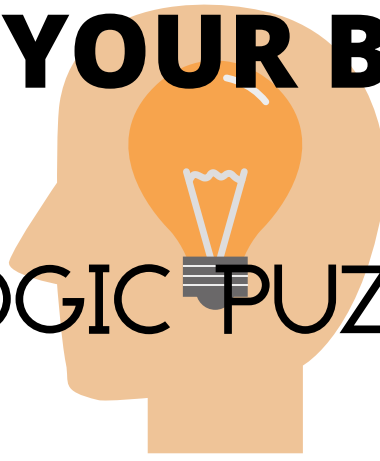
But each diner first paid $10.

$10+$10+$10=$30

Where is the last dollar?

USE YOUR BRAIN

LOGIC PUZZLE

Where Did that Dollar Go?

The Solution

Did this question confuse you? Don't worry, it's a classic because the solution isn't obvious. The answer is that there is no missing dollar at all. It is true that $9+$9+$9+$2=$29, but that has nothing to do with the total amount of money in this question.

Let's follow the cash step by step.

The waiter takes the $30 and puts it somewhere. Let's say a cash register. Than the manager decides the customers were overcharged and takes five dollars out of the cash register and gives it to the waiter. $30-$5=$25, which is the amount of the money that was added to the cash register. The waiter gives $3 to the diners and keeps $2. $25+$3+$2=$30. Everything adds up.

So what's the problem with the $9+$9+$9+$2=$29? The issue is that the two dollars the waiter took is not an addition to what the diners paid. That money was taken away and should be subtracted, not added. Instead we should do $9+$9+$9=$27, then $27-$2=$25. This is correct: the diners paid $27 dollars, the waiter took $2, so there is $25 in the cash register. What seems like a paradox is just a sneakily worded math mistake.