An Equation Easily Misinterpreted

Two Puzzles in One

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Consider the equation

$$ABC = A! + B! + C!$$

Find two ways to interpret the question "What is the solution?" and solve them both.

Here, the ! is the factorial symbol: the quantity $n!$ denotes the product of all the integers from one to n. For example

$$\begin{aligned} 3! &= 3 \cdot 2 \cdot 1 = 6 \\ 4! &= 4 \cdot 3 \cdot 2 \cdot 1 = 24 \end{aligned}$$

and 0! is equal to one.