Mathematical Operations: Notes And Examples

Mathematical Operations

Mathematical Operation is an important concept of reasoning that is usually asked in various competitive exams. This topic is asked to test the analytical abilities of the candidates. It shows how good you are at observing things and then implying it to solve the questions. To score full marks on this topic, you must practice enough questions and get acquainted with the concept behind it. Here we are providing you with the method to solve mathematical operations questions along with examples.

How to solve questions based on Mathematical Operations?

The type of questions based on Mathematical operations is:

- 1. Whether the given equations are correct
- 2. Based on Symbols equivalent to signs
- 3. Interchanging the signs
- 4. Balancing the equation
- 5. Solve the equation

For every type of Mathematical operations question, you must know only one rule i.e. BODMAS. It is "Brackets, Orders, Division, Multiplication, Addition, and Subtraction. It means you must solve any equation in the BODMAS order. First, open the brackets, then solve the powers or roots, then perform Division followed by multiplication, Addition and subtraction.

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Brackets ()	Orders powers, roots	Division ÷	Multiplication x	Addition +	Subtraction

Q1. If x stands for -, \div stands for +, + stands for \div and – stands for x, which one of the following equations is correct?

(a) 15 5 5 20 16 6 ÷ + _ X = (b) 8 10 3 5 6 8 ÷ _ + X = 2 (C) 6 3 12 3 15 X + ÷ = _ (d) $3 \div 7 - 5 \times 10 + 3 = 10$ Ans.(b) proper Sol. Using the signs, get: we Expression in (a) = $15 \times 5 + 5 - 20 \div 10 = 15 \times 5 + 5 - 2 = 75 + 5 - 2 = 78$ Expression in (b) = $8 + 10 \times 3 \div 5 - 6 = 8 + 10 \times 3/5 - 6 = 8 + 6 - 6 = 8$ Expression in (c) = $6 - 2 \div 3 + 12 \times 3 = 6 - 2/3 + 36 = 42 - 2/3 = 124/3$ Expression in (d) = $3 + 7 \times 5 - 10 \div 3 = 3 + 7 \times 5 - 10/3 = 3 + 35 - 10/3 = 104/3$