



MENTAL MATHS AND REASONING

DMAS RULE

SERIES COMPLETION

DMAS RULE

D = Division

M = Multiplication

A = Addition

S = Subtraction



WHAT IS “DMAS” RULE?

ANY SUM WITH MORE THAN ONE OPERATION
(+,-,x,÷) FIRST WE SOLVE

1. DIVISION PART
2. MULTIPLICATION PART
3. ADDITION PART
4. SUBTRACTION PART

EXAMPLE

$$25 \div 5 \times 2 - 10 + 5$$

Part1

$$25 \div 5 \times 2 - 10 + 5 = 5 \times 2 - 10 + 5$$

Part2

$$5 \times 2 - 10 + 5 = 10 - 10 + 5$$

Part3

$$10 - 10 + 5 = 10 + 5 - 10 = 15 - 10$$

Part4

$$15 - 10 = 5$$

$$\text{Ans) } 25 \div 5 \times 2 - 10 + 5 = 5$$

Complete the series with proper symbol:

$$1) \quad 72 ? 9 \times 2 - 8 = 8$$

Check 1:

$$\begin{aligned} 72 (\otimes) 9 \times 2 - 8 &= 648 \times 2 - 8 \\ &= 1296 - 8 \\ &= 1288 \quad (\text{Not matching}) \\ &\quad \text{with question} \end{aligned}$$

Check 2:

$$\begin{aligned} 72 (\oplus) 9 \times 2 - 8 &= 72 + 18 - 8 \quad [\text{DMAS rule}] \\ &= 90 - 8 \\ &= 82 \quad (\text{Not matching}) \\ &\quad \text{with question} \end{aligned}$$

Check 3:

$$\begin{aligned} 72 (\div) 9 \times 2 - 8 &= 8 \times 2 - 8 \quad [\text{DMAS rule}] \\ &= 16 - 8 \\ &= 8 \quad [\text{Answer} \\ &\quad \text{matched with} \\ &\quad \text{question}] \end{aligned}$$

$$\text{Ans) } 72 \div 9 \times 2 - 8 = 8$$

Complete the series with proper symbol:

$$2) \quad 89+1 \ ? \ 10 = 80$$

Check 1:-

$$89+1 \ominus 10 = 90 - 10 = 80 \quad [\text{Answer matches question}]$$

$$\text{Ans) } 89+1 - 10 = 80$$

Complete the following series:

3) 100, 200, 400, 800, 1600

Explanation:-

OR

$$100 + 100 = 200$$

$$100 \times 2 = 200$$

$$200 + 200 = 400$$

$$200 \times 2 = 400$$

$$400 + 400 = 800$$

$$400 \times 2 = 800$$

$$800 + 800 = 1600$$

$$800 \times 2 = 1600$$

$$1600 + 1600 = 3200$$

$$1600 \times 2 = 3200$$



Solve:

What will come in place of question mark:

1) $24?4\div4-24=0$

2) $15,32,98,394,?$

Check your answer

$$1) 24 ? 4 \div 4 - 24 = 0$$

Check 1:

$$\begin{aligned} 24 \textcircled{\div} 4 \div 4 - 24 &= 6 \div 4 - 24 \quad [\text{DMAS}] \\ &= 1.5 - 24 \\ &= -22.5 \quad [\text{Does not match} \\ &\quad \text{question}] \end{aligned}$$

Check 2:

$$\begin{aligned} 24 \textcircled{\times} 4 \div 4 - 24 &= 24 \times 1 - 24 \quad [\text{DMAS}] \\ &= 24 - 24 \\ &= 0 \quad [\text{Matches question}] \end{aligned}$$

$$\text{Ans) } 24 \times 4 \div 4 - 24 = 0$$

Check your answer

2) 15, 32, 98, 394, 1972

Exp:

$$15 \times 2 = 30 ; 30 + 2 = 32$$

$$32 \times 3 = 96 ; 96 + 2 = 98$$

$$98 \times 4 = 392 ; 392 + 2 = 394$$

$$394 \times 5 = 1970 ; 1970 + 2 = 1972$$



Thank You