

CHAPTER-12

Simplification - (BODMAS RULE)

Date _____

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Worksheet

1. Fill in the blanks \rightarrow

- a. Some involving Base bracket are to be solved first.
- b. These () brackets are called parentheses or common bracket.
- c. In BODMAS "M" stands for Multiplication.
- d. We remove the Square bracket last while simplifying.
- e. While simplifying Subtraction is the last operation to be solved.

2. Simplify \rightarrow

a. $76 \div 4 + 8 - 3 \times 2$

$= 19 + 8 - 3 \times 2$

$= 19 + 8 - 6$

$= 27 - 6$

$= ~~27~~ 21$

$$b. \quad 54 \div 9 \times 6 - 4 + 3 + 8$$

$$= 6 \times 6 - 4 + 3 + 8$$

$$= 36 - 4 + 3 + 8$$

$$= 36 - 4 + 11$$

$$= 36 + 11 - 4$$

$$= ~~43~~ 47 - 4$$

$$= 43 \text{ Ans.}$$

3. Simplify the following \Rightarrow

$$a. \quad 12 - [20 \div \{8 - 2(9 - 5 - 2)\}]$$

$$= 12 - [20 \div \{8 - 2(9 - 7)\}]$$

$$= 12 - [20 \div \{8 - 2 \times 2\}]$$

$$= 12 - [20 \div \{8 - 4\}]$$

$$= 12 - [20 \div 4]$$

$$= 12 - 5$$

$$= 7 \text{ Ans.}$$

$$\begin{aligned}
 \text{(b)} \quad & 25 - \frac{1}{2} \{ 5 + 4 - (3 + 2 - 1 + 3) \} \\
 & = 25 - \frac{1}{2} \{ 5 + 4 - (3 + 2 - 4) \} \\
 & = 25 - \frac{1}{2} \{ 5 + 4 - (5 - 4) \} \\
 & = 25 - \frac{1}{2} \{ 5 + 4 - 1 \} \\
 & = 25 - \frac{1}{2} \{ 9 - 1 \} \\
 & = 25 - \frac{1}{2} \times 8 \\
 & = 25 - 4 = 21
 \end{aligned}$$

$$\begin{aligned}
 \text{c.} \quad & 0.4 \div [1.5 \div \{ 0.6 \div (0.3 - 0.3 - 0.1) \}] \\
 & = 0.4 \div [1.5 \div \{ 0.6 \div (0.3 - 0.2) \}] \\
 & = 0.4 \div [1.5 \div \{ 0.6 \div 0.1 \}] \\
 & = 0.4 \div [1.5 \div 6] \\
 & = 0.4 \div [0.25] \\
 & = 1.6 \text{ Ans}
 \end{aligned}$$