

Chapter- 12

Simplification - BODMAS Rule

WORKSHEET

1. Fill in the blanks :

- Sums involving bar bracket are to be solved first.
- These () brackets are called parentheses or common bracket.
- In BODMAS "M" stands for Multiplication.
- We remove the square bracket last while simplifying.
- While simplifying, subtraction is the last operation to be solved.

2. Simplify :

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

Ans. $19 + 8 - 3 \times 2$

$27 - 3 \times 2$

$24 \times 2 = 48$

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

Ans. $6 \times 6 - 4 + 3 + 8$

$= 36 - 4 + 3 + 8$

$= 32 + 3 + 8$

$= 35 + 8$

$= 43$

3. Simplify the following

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

Ans. $12 - [20 \div \{8 - 2(2)\}]$

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

$= 12 - [20 \div 4]$

$= 12 - 5$

$= 7$

$$b. 25 - \frac{1}{2} \{5 + 4 - (3 + 2 - \overline{1+3})\}$$

$$\text{Ans.} = 25 - \frac{1}{2} \{5 + 4 - (3 + 2 - 4)\}$$

$$= 25 - \frac{1}{2} \{5 + 4 - (5 - 4)\}$$

$$= 25 - \frac{1}{2} \{5 + 4 - 1\}$$

$$= 25 - \frac{1}{2} \{9 - 1\} = 25 - \frac{1}{2} \times 8$$

$$= 25 - 4$$

$$= 21$$

$$c. 0.4 \div [1.5 \div \{0.6 \div (0.3 - \overline{0.3 - 0.1})\}]$$

$$\text{Ans.} = 0.4 \div [1.5 \div \{0.6 \div (0.3 - 0.2)\}]$$

$$= 0.4 \div [1.5 \div \{0.6 \div 0.1\}]$$

$$= 0.4 \div [1.5 \div \{6\}]$$

$$= 0.4 \div \left[\frac{15}{10} \times \frac{1}{6} \right]$$

$$= 0.4 \div \frac{3}{12} = \frac{4}{10} \times \frac{12}{3} = \frac{16}{10} = 1.6$$
