

Chapter- 12

Simplification - BODMAS Rule

WORKSHEET

1. Fill in the blanks :

- Sums involving Bar bracket are to be solved first.
- These () brackets are called open or common bracket.
- In B O D M A S "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. $19 + 8 - 3 \times 2$
 $19 + 8 - 6$
 $= 27 - 6$
 $= 21$

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

Ans. $6 \times 6 - 4 + 8$
 $= 36 - 4 + 8$
 $= 36 - 12$
 $= 24$

3. Simplify the following

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

Ans. $12 - [20 \div \{ 8 - 2 \times 2 \}]$
 $= 12 - [20 \div 4]$
 $= 12 - 5$
 $= 7$

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

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

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

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

$$= 25 - 4$$

$$= 21$$

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

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

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

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

$$= 0.4 \div \frac{1}{4}$$

$$= \frac{4}{10} \times \frac{4}{1} = \frac{8}{5} = 1.6$$
