

Chapter- 12

Simplification - BODMAS Rule

WORKSHEET

1. Fill in the blanks :

- a. Sums involving bar 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, DMAS is the last operation to be solved.

2. Simplify :

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

$$\begin{aligned} \text{Ans. } & 76 \div 4 + 8 - 3 \times 2 \\ & = 19 + 8 - 3 \times 2 \\ & = 19 + 8 - 6 \\ & = 27 - 6 \\ & = 21 \end{aligned}$$

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

$$\begin{aligned} \text{Ans. } & 54 \div 9 \times 6 - 4 + 3 + 8 \\ & = 6 \times 6 - 4 + 3 + 8 \\ & = 36 - 4 + 3 + 8 \\ & = 36 - 15 \\ & = 21 \end{aligned}$$

3. Simplify the following

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

$$\begin{aligned} \text{Ans. } & 12 - [20 \div \{8 - 2(9 - 5 - 2)\}] \\ & = 12 - [20 \div \{8 - 2 \times 2\}] \\ & = 12 - [20 \div 4] \\ & = 12 - 5 \\ & = 7 \end{aligned}$$

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

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

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

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

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

$$= 100$$

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

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

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

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

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

$$= 0.4 \div 0.25$$

$$= 1.6$$
