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 B O D M A S " 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 :**
   a. **76 ÷ 4 + 8 – 3 x 2**

Ans. $= 19 + 8 - 3 \times 2$
$= 19 + 8 - 6$
$= 27 - 6$
$= 21$

   b. **54 ÷ 9 x 6 – 4 + 3 + 8**

Ans. $= 6 \times 6 - 4 + 3 + 8$
$= 36 - 4 + 3 + 8$
$= 36 + 3 + 8 - 4$
$= 47 - 4$
$= 43$

3. **Simplify the following**
   a. **12 – [ 20 ÷ { 8 – 2 ( 9 – 5 -2 )}]**

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

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

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

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

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

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

$=25-\frac{1}{2}\times 8^{4}$

$=21$

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

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

$=0.4\div[1.5\div\{0.6\div0.1\}]$

$=0.4\div[1.5\div6]$

$=0.4\div[1.5\times\frac{1}{6}]$

$=0.4\div\frac{1.5}{6}$

$=0.4\times\frac{6}{1.5}$

$=\frac{0.4\times6}{1.5}=\frac{4\times\cancel{6}2}{\cancel{15}5}=\frac{8}{5}=1.6$

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