

H.W
8/12/24

Chapter 12

Simplification - BODMAS Rule.

Worksheet

1 >

a > bar

b > Parentheses

c > Multiplication

d > Square

e > Subtraction

2 >

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

$$= 19 + 8 - 3 \times 2$$

$$= 19 + 8 - 6$$

$$= 27 - 6 = 21$$

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

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

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

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

$$= 44 + 3 - 4$$

$$= 47 - 4$$

$$= 43$$

3 >

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

$$= 12 - [20 \div \{8 - 2(4)\}]$$

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

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

$$= 12 - 5$$

$$= 7$$

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

Rough

$$\begin{aligned}
 &\frac{1}{2} \times \frac{8}{1} \\
 &= \frac{4}{1} \\
 &= 4
 \end{aligned}$$

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

0.25

$$\begin{aligned}
 &6 \overline{) 1.5} \\
 &\underline{-0} \downarrow \\
 &15 \\
 &\underline{12} \\
 &30 \\
 &\underline{-30} \\
 &0 \\
 &1.6 \\
 &25 \overline{) 40} \\
 &\underline{-25} \\
 &150 \\
 &\underline{-150} \\
 &0
 \end{aligned}$$