

INTEGERS

Problem Solving Based On Removal Of Brackets

SUBJECT : MATHEMATICS
CHAPTER NUMBER: 01
CHAPTER NAME : INTEGERS

CHANGING YOUR TOMORROW

Learning outcome

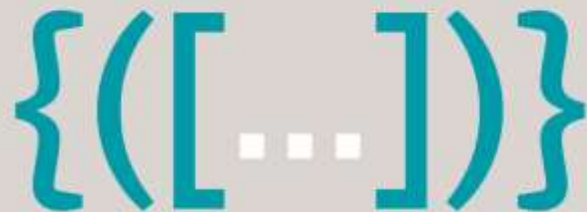
Students will be able

- to calculate multiplication involving bigger integers.
- to simplify a series of arithmetic operations on integers quickly



Video on removal of brackets

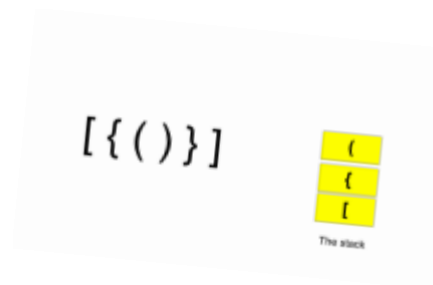
<https://www.youtube.com/watch?v=HTD0ntJI98k>



The three most common kinds of bracket:
braces, parentheses and square brackets.

Q.No. 8

$$\begin{aligned} & 17 - [17 - \{17 - (17 - 17 - 17)\}] \\ & = 17 - [17 - \{17 - (17 - 0)\}] \\ & = 17 - [17 - \{17 - 17\}] \\ & = 17 - [17 - 0] \\ & = 17 - 17 \\ & = 0 \end{aligned}$$



Q.No. 10

$$\begin{aligned} & 30 + \{ -2 \times (25 - 13 - 3) \} \\ & = 30 + \{ -2 \times (25 - 10) \} \\ & = 30 + \{ -2 \times 15 \} \\ & = 30 + [-30] \\ & = 30 - 30 \\ & = 0 \end{aligned}$$

Q.No. 9

$$\begin{aligned} & 2550 - [510 - \{270 - (90 - 80 + 7)\}] \\ & = 2550 - [510 - \{270 - (90 - 87)\}] \\ & = 2550 - [510 - \{270 - 3\}] \\ & = 2550 - [510 - 267] \\ & = 2550 - 243 \\ & = 2307 \end{aligned}$$

Q.No. 11

$$\begin{aligned} & 88 - \{5 - (-48) + (-16)\} \\ & = 88 - \left\{ 5 - \frac{(-48)}{-16} \right\} \\ & = 88 - \{5 - 3\} \\ & = 88 - 2 \\ & = 86 \end{aligned}$$

Q.No. 12

$$\begin{aligned} & 9 \times (8 - 3 + 2) - 2(2 + 3 + 3) \\ & = 9 \times (8 - 5) - 2(2 + 6) \\ & = 9 \times 3 - 2 \times 8 \\ & = 27 - 16 \\ & = 11 \end{aligned}$$

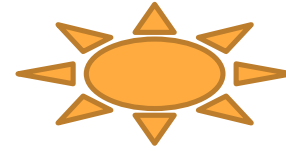


Q.No. 13

$$\begin{aligned} & 2 - [3 - \{6 - (5 - \overline{4 - 3})\}] \\ & \Rightarrow 2 - [3 - \{6 - (5 - 1)\}] \\ & \Rightarrow 2 - [3 - \{6 - 4\}] \\ & \Rightarrow 2 - (3 - 2) \\ & \Rightarrow 2 - 1 = 1 \end{aligned}$$

HW Exercise 1C Q.No. 3 & 4





AHA

i) $23 - [23 - \{23 - (23 - 23 - 23)\}]$

ii) $2550 - [510 - \{270 - (90 - 80 + 70)\}]$

THANKING YOU
ODM EDUCATIONAL GROUP