

Class: 7th

Subject: Mathematics

Chapter 4: Expressions Using Letters -Numbers

Q1: Write the following statements in algebraic form

- a. Five more than a number x
- b. Seven added to three times the product of x^2 and y .

Q2: There are some oranges in a basket. 10 oranges are taken out from it. How many oranges are left in the basket?

Q3: Reena is 4 years older than her younger brother Raju. What is Reena's age?

Q4: Add the following expressions by both methods - Horizontal and Column

- a) $5a + 6b - 3ab$, $8a + 14b + 7ab$ and $12a - 11b + 8ab$
- b) $21mn^2 - 6mnp + 4n^2$, $27n^2m + 10n^2 + 4mnp$ and $15mnp + 15n^2 - 6mn^2$

Q5: Subtract the following expressions by both methods - Horizontal and Vertical

- a) Subtract $15ab - 3a^2 - 10ac$ from $15ab - 6a^2 + 8c$
- b) Subtract $3x + 4y$ from $-6x + 2y$

Q6: Subtract the sum of $3m^2 - 6mn + 4n^2$ and $6m^2 - 3n^2 + 8mn$ from the sum of $2n^2 + 5m^2 - 6mn$ and $3m^2 + 8mn + 5n^2$

Q7: A box contains y chocolates. Half of them are distributed among children and then 12 more chocolates are added.

- a) Write an expression for the final number of chocolates.
- b) Find the result when $y = 48$

Q8: Find the value of the expression if $x = 2$, $y = -1$ and $a = 3$

Expression: $-3x^2 + 4y + 1$