

Practice Paper Maths (Algebraic Expressions)

- What should be added to $a^2 + 2ab + b^2$ to obtain $4ab + b^2$?
- Simplify:
 - $4x - [9x - \{x + 3x - 2 + (x - 4x)\}]$
 - $(4x^2 - 7y + 8x) - \{x^2 - (x^2 + y) - 2y + 8x\}$
 - $z^2 + (z^3 - 2z^2 + z^3) - (2z + 1) - (z^2 + 3z)$
 - $2x - [3x - \{4x - (3y - 2x - 2y)\}]$
- Sum of the digits of a two digit no is 8. On adding 18 to num, its digits are interchanged. Determine the no.
- A bag contains 25 paise & 50 paise coins whose total value is Rs. 30. If the no of 25paise coins is 4 times that of 50 paise coins, find the no of each type of coin.
- Find coefficients as mentioned:
 - Of x^2 in $5a\{x^2 - 5by^2 + x(4a - 3x)\}$
 - Of z in $\frac{x - 2zy + z}{12}$
 - Of y^2 in $3y^2 + 4xz - 1.5y^2 - 12z^2y + 5/12x^2$
- Find x if $\frac{3x-10}{10x-3} = \frac{8}{57}$.
- The perimeter of a rectangle is 100m. if length is 10 units greater than its breadth, determine its length and breadth.
- If 625 balls are distributed in five boxes such that each box has equal no of balls in it. How many balls are there in each box.
- 20 large buckets of water can completely fill a tank. The same tank can be filled using 30 smaller buckets. If the tank capacity is of 1200 ltrs. Find capacity of the individual buckets.
- Find x in following:
 - $20x - 5 = 5(7x - 10)$
 - $3x - 24 + 9x = 12$
 - $\frac{8}{x-10} = 1$
 - $\frac{x}{2} + \frac{3}{2} = \frac{2x}{5} - 1$
- If population of a certain town A is 7 times that of town B and the population of the two towns is 200000. Find population of each town A & B.
- 21 times a number gives a product which is 400 more than that no. Determine the no. we are talking about.