

Subject: - Mathematics

## PRACTICE PAPER (MCQ)

## CBSE-8<sup>th</sup>

Topic: - Algebraic Expressions

- If  $(x + 2)(x + 8) - (x + 3)(x - 3) = 0$ , what is the value of  $x$ ? Ans. (c)  
 a)  $-10$                       b)  $0$                       c)  $-\frac{5}{2}$                       d)  $9$
- $(x^2 - 1) \div (x + 2)$  is: - Ans. (b)  
 a)  $(x - 2) + \frac{-5}{x+2}$                       b)  $x - 2 + \frac{3}{x+2}$                       c)  $x + 2 + \frac{-5}{x-2}$                       d)  $x + 2 + \frac{3}{x-2}$
- If  $a + b = 15$  and  $a^2 - b^2 = 60$ , what is the value of  $a - b$ ? Ans. (d)  
 a)  $45$                       b)  $75$                       c)  $8$                       d)  $4$
- If  $xy = 20$  and  $(x + y)^2 = 70$ , then  $x^2 + y^2 = ?$  Ans. (c)  
 a)  $25$                       b)  $35$                       c)  $30$                       d)  $50$
- If  $x + \frac{1}{x} = 2$ , then  $x^2 + \frac{1}{x^2} = ?$  Ans. (b)  
 a)  $4$                       b)  $2$                       c)  $0$                       d) None of these.
- If the area of the rectangle is  $24(x^2yz + xy^2z + xyz^2)$  and its length is  $8xyz$ , then its breadth is: - Ans. (a)  
 a)  $3(x + y + z)$                       b)  $3xyz$                       c)  $3(x + y - z)$                       d) None of these.
- Volume of rectangular box whose adjacent edges are  $3x^2y$ ,  $4y^2z$  and  $5z^2x$  respectively is: - Ans. (c)  
 a)  $60xyz$                       b)  $60x^2y^2z^2$                       c)  $60x^3y^3z^3$                       d) None of these.
- When  $x^{13} + 1$  is divided by  $x + 1$ , the remainder is: - Ans. (b)  
 a)  $-1$                       b)  $0$                       c)  $1$                       d)  $2$
- Which one of the following is not a factor of  $x^3 + 2x^2 + x$ . Ans. (a)  
 a)  $x + 2$                       b)  $x + 1$                       c)  $x$                       d)  $x(x + 1)$
- Simplify:  $-3a - [4b - \{a - (3c - 2b) + 5c - 3(a - 2b - 3c)\}]$  Ans. (a)  
 a)  $a + 4b + 11c$                       b)  $2a + 3b + 9c$                       c)  $a + 9b + 12c$                       d)  $2a + 5b + 11c$