

**PSBB LEARNING LEADERSHIP ACADEMY**  
**WEEKEND ASSIGNMENT**  
**CLASS: VIII**  
**MATHEMATICS**

1. The common factor of  $3ab$  and  $2cd$  is

- (a) 1 (b)  $-1$  (c)  $a$  (d)  $c$

2. The value of  $(3x^3 + 9x^2 + 27x) \div 3x$  is

- (a)  $x^2 + 9 + 27x$  (b)  $3x^3 + 3x^2 + 27x$  (c)  $3x^3 + 9x^2 + 9$  (d)  $x^2 + 3x + 9$

3. The correct mathematical statement for the given equation is:

$$x(3x+2) = 3x^2+2$$

- (a)  $3x^2+2x$  (b)  $3x^2$  (c)  $5x^2+2x$  (d) none of these

4. What are the factors of  $x^2+xy-2xz-2yz$ ?

- (a)  $(x-y)$  and  $(x+2z)$  (b)  $(x+y)$  and  $(x-2z)$  (c)  $(x-y)$  and  $(x-2z)$  (d)  $(x+y)$  and  $(x+2z)$

5. Amrit and Pankaj expanded  $(x-5)^2$ . Amrit's answer is  $x^2-25$  and Pankaj's answer is  $x^2-10x+25$ . Which of the following statements is correct?

- (a) Amrit's answer is correct. (b) Pankaj's answer is wrong. (c) Both got correct answer. (d) Pankaj's answer is correct.

6. What is the coefficient of 'a' when  $9a^2+18a$  is divided by  $(a+2)$ ?

- (a) 18 (b) 9 (c)  $\frac{1}{2}$  (d) 2

7. When we factorise an expression, we write it as a \_\_\_\_\_ of factors.

- (a) sum (b) difference (c) product (d) (b) & (c) both

8. Factorise:

(a)  $(3x - y)^2 - 2(3x-y) - 35$

(b)  $x^2+2xy - 15y^2$

9. Find the factors of given expression  $x^4+x^2+1$

10. Factorise (mention the identity used)

(a)  $49 - 25x^2$

(b)  $9x^2 - (2x - 3y)^2$

(c)  $3x - 243x^5$

(d)  $\frac{4}{9}x^2 - \frac{25}{36}y^2$

10. Evaluate using identities:

$$\frac{96 \times 96 - 4 \times 4}{92}$$

11. Divide:

(a)  $-24x^3y^2z^3$  by  $8x^2yz^2$

(b)  $9x^4 - 18x^3 + 4x^2$  by  $2x$