ST. LAWRENCE HIGH SCHOOL

A JESUIT CHRISTIAN MINORITY INSTITUTION

CLASS 8

SUBJECT :Algebra& GeometryWork sheet22

Marks:15Factorisation

Date:11.5.21

1. Find the incorrect mathematical statement.
   (a) $4(x - 5) = 4x - 20$
   (b) $3x + 2x = 5x^2$
   (c) $x(3x + 2) = 3x^2 + 2x$
   (d) $2x + 3x = 5x$

2. Factors of $p^2 + 6p + 8$ are
   (a) $(p + 2)(p - 4)$
   (b) $(p - 2)(p - 4)$
   (c) $(p + 2)(p + 4)$
   (d) $(p - 2)(p + 4)$

3. Factors of $a^2 + 8a + 16$ are:
   (a) $(a + 4)(a - 4)$
   (b) $(a + 4)(a + 4)$
   (c) $(a + 4)(4 - a)$
   (d) $(a - 4)(a - 4)$

4. Factors of $2x + 4$ is
   (a) $2(x - 4)$
   (b) $2(x + 4)$
   (c) $2(x - 2)$
   (d) $2(x + 2)$

5. Factors of $5xy + 10x$ is
   (a) $5x(y + 2)$
   (b) $5y(x + 2)$
   (c) $5x(y - 2)$
   (d) none of these

6. Factors of $12a^2b + 15ab^2$ is
   (a) $3ab(4a + 5b)$
   (b) $3ab(4a + 15b)$
   (c) $ab(12a + 15b)$
   (d) none of these

7. Factors of $10x^2 - 18x^3 + 14x^4$ is
   (a) $2x^2(7x^2 - 9x + 5)$
   (b) $x^2(14x^2 - 18x + 10)$
   (c) $2x(7x^3 - 9x^2 + 5x)$
   (d) none of these

8. Factors of $12x + 36$ is
   (a) $2(6x + 18)$
   (b) $4(3x + 9)$
   (c) $12(x + 3)$
   (d) none of these

9. Factors of $22y - 33z$ is
   (a) $22y - 33z$
   (b) $11(y - 3z)$
   (c) $11(y - z)$
   (d) none of these

10. Factors of $14pq + 35pqr$ is
    (a) $pq(14 + 35r)$
    (b) $7pq(2 + 5r)$
    (c) $7pq(14 + 5r)$
    (d) none of these

11. Factors of $2xy + 2y + 3x + 3$ is
    (a) $(x + 1)(2y + 1)$
    (b) $(x + 1)(2y + 3)$
    (c) $(x + 3)(2y + 1)$
    (d) none of these

12. Factors of $6xy - 4y + 6 - 9x$ is
    (a) $(3x - 2)(2y + 3)$
    (b) $(3x - 2)(2y - 3)$
    (c) $(3x + 2)(2y - 3)$
    (d) none of these

13. Factors of $7a^2 + 14a$ is
    (a) $a(7a + 14)$
    (b) $7a(a + 14)$
    (c) $7a(a + 2)$
    (d) none of these

14. Factors of $5x^2y - 15xy^2$ is
    (a) $xy(5x - 15y)$
    (b) $5xy(x - 3y)$
    (c) $5xy(x - 5y)$
    (d) none of these

Answer all thefollowing questions(1×15=15)

15. Factors of $x^2 + 2x + 1$ is

(a) $(x+1)(x+1)$
(b) $(x-1)^2$
(c) $x+2$
(d)none of these

Indranil Ghosh