# ST. LAWRENCE HIGH SCHOOL

**A  JESUIT CHRISTIAN MINORITY INSTITUTION**

**CLASS 8**

**SUBJECT :Algebra andGeometryWork sheet24**

**Marks:15Factorisation**

**Date:17.5.2021**

1. Factors of $ax^2y + bxy^2 + cxyz$ is
   (a) $xy(ax + by + cz)$    (b) $xyz(ax + by + c)$    (c) $yz(ax + by + cz)$    (d) none of these

2. Factors of $x^2 + xy + 8x + 8y$ is
   (a) $(x + y)(y + 8)$    (b) $(x + y)(x + 8)$    (c) $(x + y)(8 + y)$    (d) none of these

3. Factors of $15xy - 6x + 5y - 2$ is
   (a) $(5y - 2)(3x + 2)$    (b) $(5y - 2)(3x + 1)$    (c) $(5y - 1)(3x + 2)$    (d) none of these

4. Factors of $ax + bx - ay - by$ is
   (a) $(a - b)(x + y)$    (b) $(a + b)(x + y)$    (c) $(a + b)(x - y)$    (d) none of these

5. Factors of $15pq + 15 + 9q + 25p$ is
   (a) $(5p + 3)(3q + 5)$    (b) $(5p + 3)(q + 5)$    (c) $(p + 3)(3q + 5)$    (d) none of these

6. Factors of $z - 7 + 7xy - xyz$ is
   (a) $(z - 7)(1 - xy)$    (b) $(z - 7)(xy - 1)$    (c) $(7 - z)(1 - xy)$    (d) none of these

7. Factors of $x^2 + 8x + 16$ is
   (a) $(x + 8)(x + 2)$    (b) $(x + 4)(x + 2)$    (c) $(x + 4)(x + 4)$    (d) none of these

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

9. Factors of $49p^2 - 36$ is
   (a) $(7p - 9)(7p + 4)$    (b) $(7p + 4)(7p - 9)$    (c) $(7p - 6)(7p + 6)$    (d) none of these

10. Factors of $a^2 - 2ab + b^2 - c^2$ is
    (a) $(a - b - c)(a - b + c)$ (b) $(a + b - c)(a + b + c)$ (c) $(a - b + c)(a - b + c)$ (d) none of these

11. Factors of $m^4 - 256$ is
    (a) $(m^2 - 16)(m^2 - 16)$ (b) $(m^2 + 16)(m^2 + 16)$ (c) $(m^2 + 16)(m^2 - 16)$ (d) none of these

12. Factors of $x^2 + 5x + 6$ is
    (a) $(x + 3)(x + 2)$    (b) $(x + 4)(x + 2)$    (c) $(x + 6)(x + 1)$    (d) none of these

13. Factors of $x^2 - 25$ is
    (a) $(x - 1)(x - 25)$    (b) $(x - 1)(x + 25)$    (c) $(x - 5)(x - 5)$    (d) $(x - 5)(x + 5)$

14. Factors of $36 - 9x^2$ will be
    (a) $(6 + 3x)(6 - 3x)$    (b) $(3x - 6)(6 - 3x)$    (c) $(3x + 6)(3x - 6)$    (d) $(12x - 3x)(3 + 3x)$

15. Square of $\left( x - \dfrac{1}{x} \right)$ will be

    (a) $x^2 - 2 - \dfrac{1}{x^2}$      (b) $x^2 - 2 + \dfrac{1}{x^2}$      (c) $x^2 - 4 - \dfrac{1}{x^2}$      (d) $x^2 - 2 + \dfrac{1}{x}$

**Answer all thefollowing questions(1×15=15)**

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