



ST. LAWRENCE HIGH SCHOOL



A JESUIT CHRISTIAN MINORITY INSTITUTION

CLASS 8

SUBJECT : Algebra and Geometry

Work sheet 14

Marks:15

Factorisation (continued)

Date:22.4.2020

Answer all the following questions(1×15=15)

1. H.C.F. of $6abc$, $24ab^2$, $12a^2b$ is

- (a) $6ab$
- (b) $6ab^2$
- (c) $6a^2b$
- (d) $6abc$

2. Factors of $12a^2b + 15ab^2$ are

- (a) $3a(4ab + 5b^2)$
- (b) $3ab(4a + 5b)$
- (c) $3b(4a^2 + 5ab)$
- (d) none of these

3. Factors of $6xy - 4y + 6 - 9x$ are

- (a) $(3y - 2)(2x - 3)$
- (b) $(3x - 2)(2y - 3)$
- (c) $(2y - 3)(2 - 3x)$
- (d) none of these

4. Factors of $49p^3q - 36pq$ are

- (a) $p(7p + 6q)(7p - 6q)$
- (b) $q(7p - 6)(7p + 6)$
- (c) $pq(7p + 6)(7p - 6)$
- (d) none of these

5. Factors of $y(y - z) + 9(z - y)$ are

- (a) $(y - z)(y + 9)$
- (b) $(z - y)(y + 9)$
- (c) $(y - z)(y - 9)$
- (d) none of these

6. Factors of $(lm + l) + m + 1$ are

- (a) $(lm + l)(m + 1)$
- (b) $(lm + m)(l + 1)$
- (c) $l(m + 1)$
- (d) $(l + 1)(m + 1)$

7. Factors of $3ab + 6bc + 4ad + 8cd$ are

- (a) $(ab + 2c)(a + d)$
- (b) $(bc + a)(d + 1)$
- (c) $(a + 2c)(3b + 4d)$
- (d) $(a + 4c)(b + 2d)$

8. Factors of $63a^2 - 112b^2$ are

- (a) $63(a - 2b)(a + 2b)$
- (b) $7(3a + 2b)(3a - 2b)$
- (c) $7(3a + 4b)(3a - 4b)$
- (d) none of these

9. Factors of $p^4 - 81$ are

- (a) $(p^2 - 9)(p^2 + 9)$
- (b) $(p + 3)^2(p - 3)^2$
- (c) $(p + 3)(p - 3)(p^2 + 9)$
- (d) none of these

10. Factors of $9x^2 + 12x + 4$ are

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

11. Factors of $16x^2 + 40x + 25$ are

- (a) $(4x + 5)(4x + 5)$
- (b) $(4x + 5)(4x - 5)$
- (c) $(4x + 5)(4x + 8)$
- (d) none of these

12. Factors of $x^2 - 4xy + 4y^2$ are

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

13. Factors of $x^2 + (a + 1/a)x + 1$ are

(a) $(x + a)(x + 1/a)$

(b) $(x-a)(x+a)$

(c) $(x+a)(x-1/a)$

(d) $(x-a)(x-1/a)$

14. $y(y^2 - 2y) + 2(2y - y^2) - 2 + y$

(a) $(y-1)^2(y-2)$

(b) $(y-1)^2$

(c) $(y-1)(y-2)$

(d) $(y-1)^2(y+2)$

15. Factors of $4x^2 - 12x + 9$ are

(a) $(2x-3)(2x-3)$

(b) $(2x+3)(2x-3)$

(c) $(2x+3)(2x+3)$

(d) $-(2x-3)(2x-3)$

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