



ST. LAWRENCE HIGH SCHOOL

A JESUIT CHRISTIAN MINORITY INSTITUTION



Sub: Algebra and Geometry

Class: 7

Date: 21.11.20

Duration: 40 min

Worksheet Solution 05

Full Marks: 15

Algebraic Expression

Choose the Correct options:

- The product of $-8x^2y$ and $3x^3y^3$ is
 - $-24x^5y^4$
 - $24x^5y^4$
 - $-8x^6y^4$
 - $3x^{24}y^5$
- $(x+2)x(x+6)$ gives
 - $x^2 + 8x - 12$
 - $x^2 + 8x + 12$
 - $x^2 + 6x + 2$
 - $x^2 + 2x + 6$
- $(p - \frac{2q}{3})(p + \frac{2q}{3})$ gives
 - $p^2 - \frac{4q^2}{9}$
 - $p^2 + \frac{4q^2}{9}$
 - $p^2 - \frac{4q^2}{9} + \frac{4pq}{3}$
 - $p^2 - \frac{4q^2}{9} - \frac{4pq}{3}$
- Simplify $6a^2 + 2a(4a + 3b) - 12ab$
 - $14a^2 - 6ab$
 - $14a^2 - 18ab$
 - $14a^2 - 12ab + 3b$
 - $14a^2 - 12ab + 2a + 3b$
- Find the product of $2x^2 \cdot (3x - 4y) \cdot 4xy \cdot (x + 2y)$
 - $24x^5y + 16x^4y^2 - 64x^3y^3$
 - $24x^5y + 16x^4y^2 + 64x^3y^3$
 - $24x^5y - 16x^4y^2 - 64x^3y^3$
 - $24x^5y + 64x^4y^2 - 16x^3y^3$
- Divide $12x^3$ by $3x$
 - 4
 - $4x$
 - $4x^2$
 - 12
- Divide $4a^3 + 8a^4$ by $4a$
 - $a^2 + 2a^3$
 - $a^3 + 8a^2$
 - $9a^3$
 - $3 + 8a^4$
- Divide $a^2 + 4a + 4$ by $a + 2$
 - $a - 2$
 - $a + 2$
 - $4a + 4$

- d. $a^2 + 2a$
9. Divide $-\frac{8}{9}x^4y^3by - \frac{4}{27}x^3y^2$
- a. $3x^2y$
- b. $2xy^2$
- c. **$6xy$**
- d. $\frac{3x}{2y}$
10. Divide $x^2 - 3x + 2$ by $x + 2$
- a. **$x - 1$**
- b. $x - 2$
- c. $x^2 - 2x$
- d. $x + 2$
11. Simplify $8 + (a - 2)$
- a. **$a + 6$**
- b. $a - 6$
- c. $6 - a$
- d. $6a$
12. Simplify $5 + 2(a - 2)$
- a. **$2a + 1$**
- b. $2a - 1$
- c. $1 - 2a$
- d. $2a$
13. Simplify $6a - (8a - 3)$
- a. **$3 - 2a$**
- b. $2a - 3$
- c. $3a - 2$
- d. $2 - 3a$
14. Simplify $p - 3(p - q)$
- a. $3p - 2q$
- b. **$3q - 2p$**
- c. $2p + 3q$
- d. $2q - 3p$
15. Simplify $a(a - b) - b(b - a)$
- a. $a^2 - 2ab + b^2$
- b. $a^2 + 2ab + b^2$
- c. $a^2 + ab - b^2$
- d. **$a^2 - b^2$**