Class VII
Vacation Work Sheet (Both campus)
Chapter- 4(E.X-4.1, 4.2, 4.3)

CREATIVE QUESTION

1. $x^4 + 8x^2 + 15$, $x^2 + 5$ are two algebraic expression.
    a) Subtract the second expression from the first expression.
    b) Find the product of the two expression.
    c) Divide first expression by the second expression.

2. (3b-5c),(a-2b) and (2b-c-4a) are three algebraic expression.
    a) Multiply 3rd exp by 1st expression.
    b) Simplify:{2a-(3b-5c)}-[a-{2b-(c-4a)}-7c].
    c) Show that,$(x + y)(x - y)(x^2 + y^2) = x^4 - y^4$.

3. (4x+5y),(-5y+9z) and (9z-3x+7y-5) are three algebraic expression.
    a) Write the additive inverse expression of the 3rd expression and subtract the obtained third expression from sum of the 1st and 2nd expression.
    b) Multiply 3rd expression by 2nd expression .
    c) Simplify: 4x+[-5y-{9z+(3x-7y+x)}].

4. If $3x^2y^2$. $45x^4y^{10}$ and $10x^5y^3+6x^4y^7-12x^3y^7$ be three algebraic expression.
    a) Divide $45x^4y^{10}$ by $3x^2y^2$
    b) Divide $10x^5y^3+6x^4y^7-12x^3y^7$by $3x^2y^2$.
    c) Divide $10x^5y^3+6x^4y^7-12x^3y^7$ by $2x^4y$.

5. x^4-1 and x^2+1 are two algebraic expressions.

    a) Subtract the second expression from the first expression.
    b) Find the product of the two expressions.
    c) Divide first expression by second expression.

6. $x^4 + x^2 + 1$ and $x^2 - x + 1$ are two algebraic expressions.

    a) Subtract the second expression from the first expression.
    b) Find the product of the two expressions.
    c) Divide first expression by second expression.

7.If $A = x^2 - xy + y^2$,B=$x^2 + xy + y^2$, and $C = x^4 + x^2y^2 + y^4$
    a).Find the sum of A and B.
    b). Find the product of A and B.
    c) . Show that $\frac{C}{A} \times \frac{1}{B}$ =1

8.If P=64-a^3, q = a - 4,

a). What is the value of $\frac{p}{q}$?

b). Show that $(x+y)(x-y)(x^2 + y^2) = x^4 - y^4$

c). Divide $81p^4 + q^4 - 22p^2q^2$ by $9p^2 + 2pq - q^2$

9.(2a-3), (2b+5) and (b-3) are three algebraic expression

a) .Write the additive inverse expression (-2a+2b-a) and subtract the obtained third expression from sum of the 1st and 2nd expression.

b). Multiply 3rd expression by 2nd expression.

c) . Simplify:8b-3{2a-3(2b+5)-5(b-3)}-3b

Compiled by---

Md.Masud Rana
Senior Asst. Math Teacher
Cosmo School and College
Mirpur 12, Dhaka.
Phone No:01622629662
Email :Masudrana7580@yahoo.com