Riviera International Academy

Assignment-2077

(Shrawan 20, 2077, Tuesday)

Class: Eight

<u>Subject- Mathematics</u>

Source: Photo of exercise are given below.
Work: Complete ex.8.1 up to 5
Do your work neatly

EXERCISE 8.2

General Section - Classwork

1. Let's tell and write the expanded forms of these expressions.

Expressions	Expanded forms
a) $(x + y)^2$	
b) $(a + 1)^2$	
c) $(p + 2)^2$	
d) $(y + 3)^2$	

Expressions	Expanded forms
e) $(x - y)^2$	
f) $(m - 1)^2$	
g) $(a - 2)^2$	
h) $(p - 3)^2$	

2. Let's tell and write the following products in the forms of difference of two square terms.

a) $(x + y)(x - y) =$ ....
b) $(x + 1)(x - 1) =$ ....
c) $(p + 2)(p - 2) =$ ....
d) $(m + 3)(m - 3) =$ ....
e) $(a + \frac{1}{a})(a - \frac{1}{a}) =$ ....
f) $(x + \frac{2}{x})(x - \frac{2}{x}) =$ ....
g) $(\frac{3}{p} + p)(\frac{3}{p} - p) =$ ....
h) $(\frac{4}{m} + m)(\frac{4}{m} - m) =$ ....

3. Let's tell and write the following expressions in the forms of cube of sum or difference of two terms.

a) $x^3 + 3x^2y + 3xy^2 + y^3 =$ ....
b) $x^3 - 3x^2y + 3xy^2 - y^3 =$ ....
c) $x^3 + 3.x^2.1 + 3.x.1^2 + 1^3 =$ ....
d) $a^3 - 3.a^2.2 + 3.a.2^2 - 2^3 =$ ....
e) $p^3 + 3.p^2.\frac{1}{p} + 3.p.\frac{1}{p^2} + \frac{1}{p^3} =$ ....
f) $x^3 - 3.x^2.\frac{1}{x} + 3.x.\frac{1}{x^2} - \frac{1}{x^3} =$ ....

4. Let's tell and write the following expressions in the forms of cube of sum or difference of two cubed terms.

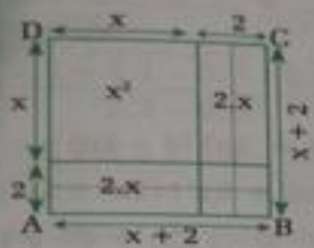
a) $(x + y)(x^2 - xy + y^2) =$ ....
b) $(x - y)(x^2 + xy + y^2) =$ ....
c) $(a + 1)(a^2 - a + 1) =$ ....
d) $(p - 2)(p^2 + 2p + 4) =$ ....
e) $(2 + \frac{1}{2})(2^2 - 1 + \frac{1}{4}) =$ ....
f) $(\frac{1}{3} - 3)(\frac{1}{9} + 1 + 9) =$ ....

Creative Section - A

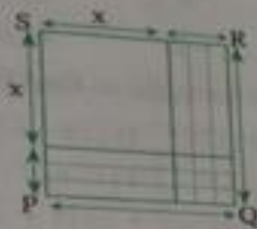
5. **Let's look at these diagrams and write the areas in algebraic expression forms as shown in the example.**

Area of ABCD = $x^2 + 1.x + 1.x + 1^2$

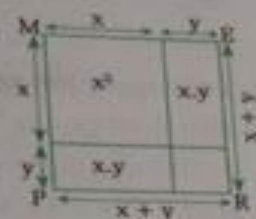
$(x + 1)^2 = x^2 + 2x + 1$

a) 

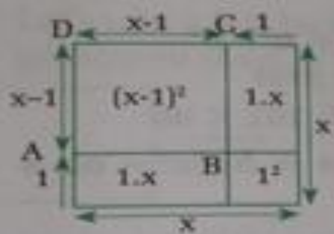
Area of ABCD

b) 

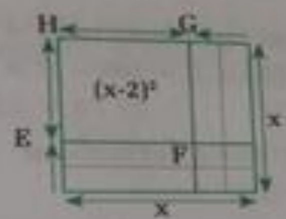
Area of PQRS

c) 

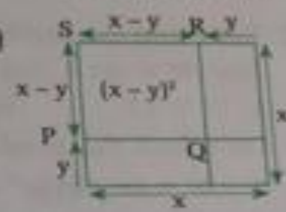
Area of PREM

d) 

Area of ABCD

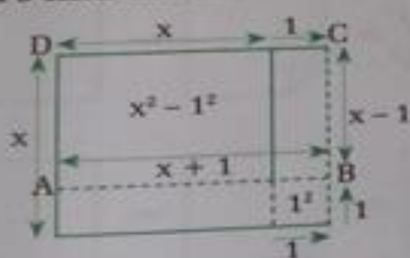
e) 

Area of EFGH

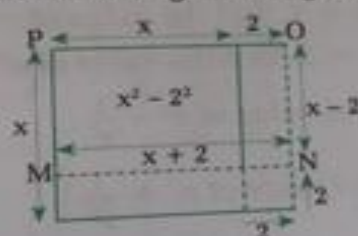
f) 

Area of PQRS

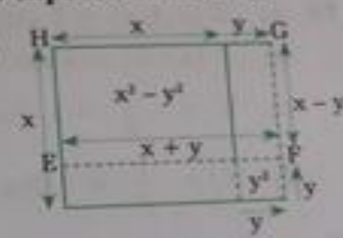
6. **Let's find the area of each of these rectangles in algebraic expression forms.**

a) 

Area of ABCD

b) 

Area of MNOP

c) 

Area of EFGH

7. a) Find the squares of (i) $2a + 1$ (ii) $x - 3y$ (iii) $a - \frac{1}{a}$ (iv) $x + \frac{1}{x}$

b) Find the cubes of (i) $p + 2$ (ii) $2a - b$ (iii) $y + \frac{1}{y}$ (iv) $x - \frac{1}{3x}$

c) Expand (i) $(3x - 1)^2$ (ii) $(2y + \frac{1}{2y})^2$ (iii) $(2p + q)^3$ (iv) $(3x - \frac{1}{3x})^3$

8. a) Express (i) $x^2 + 2x + 1$ (ii) $a^2 - 4ab + 4b^2$ (iii) $9p^2 + 12pq + 4q^2$ as perfect squares.

b) Express (i) $x^3 + 6x^2 + 12x + 8$ (ii) $8a^3 - 36a^2 + 54a - 27$ (iii) $p^3 - 9p^2q + 27pq^2 - 27q^3$ as perfect cubes.

Subject- HPE

Write short notes on thyroid gland.

Subject-OBT

Unit 3

Read the lesson.

Ex 2 write short notes on.

Subject- Science

1. Which group of modern periodic table called alkali earth metal and why?
2. Why Neon is called inert gas?
3. What is chemical equation? Write the molecular formula of any five compounds.
4. What is product in chemical reaction? Write the role of arrow used in a chemical equation. Differentiate between reactant and product.

The End.