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CLASS - VI, SECTION - A
SCHOOL NO - 4659

Exercise - 18 (B)

(1)

Constants	variables
$6, \frac{5}{4}, 0$	$4y, -3x, \frac{4}{5}xy, az, 7p, \frac{2x}{y}, \frac{3}{4x}, \frac{-xz}{3y}$

(2) (i) Like terms are:- $4x, -x, \frac{2}{3}x$ and $-3y, \frac{4}{5}y$ and y.

(ii) Like terms are:- $\frac{2}{3}xy, -4yx, yx$ and $2yz, -\frac{2}{3}yz, \frac{zy}{3}$.

(iii) Like terms are:- $-ab^2, 7b^2a, 2ab^2$ and $b^2a^2, -3a^2b^2$

(iv) Like terms are:- $5ax, -7xa, \frac{2ax}{3}$ and $-5by, \frac{by}{7}$

3) (i) 16 is a constant and y is a variable, but 16y is variable. (True)

(ii) 5x has two terms 5 and x (False)

(iii) The expression $5+x$ has two terms 5 and x (True).

(iv) The expression $2x^2+x$ is a trinomial (False).

(v) ax^2+bx+c is a trinomial. (True)

(vi) $8xab$ is a binomial. (False)

(vii) $8+ab$ is a binomial. (True)

(viii) $x^3-5xy+6x+7$ is a polynomial. (True)

(ix) $x^3 - 5xy + 6x + 7$ is a multinomial. (True)

(x) the coefficient of x in $5x$ is $5x$. (False)

(xi) the coefficient of a in $-ab$ is -1. (True)

(xii) the coefficient of y in $-3xy$ is -3. (False)

4. (i) The number of terms in $2a - b = 2$

(ii) The number of terms in $3x + \frac{a}{2} = 2$

(iii) The number of terms in $3x - \frac{x}{p} = 2$

(iv) The number of terms in $a \div x \times b + c = 2$

(v) The number of terms in $3x \div 2 + y + 4 = 3$

(vi) The number of terms in $xy \div 2 = 1$

(vii) The number of terms in $x + y \div a = 2$

(viii) The number of terms in $2x + y + 8 \div y = 3$

(ix) The number of terms in $2x a + \frac{3}{3} \div b + 4 =$

5. (i) xy and $-yx$ are like terms. (TRUE)

(ii) x^2y and $-y^2x$ are like terms. (False)

(iii) a and $-a$ are like terms. (True)

(iv) -ba and 2aba are unlike terms. (False)

(v) 5 and 5x are like terms. (False)

(vi) 3xy and 4xyz are unlike terms. (True)

6. (i) xy - Monomial

(ii) xy + x - Binomial

(iii) 2x ÷ y - Monomial

(iv) -a - Monomial

(v) $ax^2 - x + 5$ - Trinomial

(vi) -3bc + d - Binomial

(vii) 1 + x + y - Trinomial

(viii) 1 + x ÷ y - Binomial

(ix) $x + xy - y^2$ - Trinomial

7. (i) Coefficient of x :-

(i) $x = 1$ (ii) $-3x = -3$

(ii) $-x = -1$ (iv) $-5ax = -5a$

(v) $\frac{3}{2}xy = \frac{3}{2}y$ (vi) $\frac{ax}{y} = \frac{a}{y}$

8) (i) Coefficients of :

(i) x in $-3xy^2$: $= -3y^2$

(ii) x in $-ax$: $= -a$

(iii) y in $-y$: $= -1$

(iv) y in $\frac{2}{a}y$: $= \frac{2}{a}$

(v) xy in $-2xyz$: $= -2z$

(vi) ax in axy^2 : $= y^2$

(vii) x^2y in $-3ax^2y$: $= -3a$

(viii) xy^2 in $5axy^2$: $= 5a$

9) Numeral coefficients of the following :

(i) $5xy$: $= 5$

(ii) abc : $= 1$

(iii) $5pqr$: $= 5$

(iv) $\frac{-2x}{y}$: $= -2$

(v) $\frac{2}{3}xy^2$: $= \frac{2}{3}$

(vi) $\frac{-15xy}{2z}$: $= -\frac{15}{2}$

(vii) $-7x \div y$: $= -7$

(viii) $-3x \div (2y)$: $= -\frac{3}{2}$

10. The degree of following polynomials :-

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

(ii) $5x^2-7x+2 = 2$

(iii) $x^3-x^8+x^{10} = 10$

(iv) $1-100x^{20} = 20$

(v) $4+4x-4x^3 = 3$

(vi) $8x^2y-3y^2+x^2y^5 = 2+5 = 7$

(vii) $8z^3-8y^2z^3+7yz^5 = 1+5 = 6$

(viii) $4y^2-3x^3+y^2x^7 = 2+7 = 9$