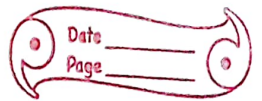


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Exercise - 18 (B)

(1)

Constants

$$6, \frac{5}{4}, 0$$

variables

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

(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 $2yz, -\frac{2}{3}yz, \frac{2y}{3}$.

(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 $-5by, \frac{6y}{7}$.

3) (i) 6 is a constant and y is a variable, but $6y$ 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 $-a$ 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 $a + x + b + c = 2$

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

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

(vii) The number of terms in $x + y + a = 3$

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

(ix) ~~the~~ The number of terms in $2xa + 3b + 4 = 3$

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 2ab are unlike terms. (False)
 (v) 5a and 5x are like terms. (False)
 (vi) $3xy$ and $4xyz$ ^{are} unlike terms. (True)

6. (i) xy - Monomial

(ii) $xy + x$ - Binomial

(iii) $2x \div y$ - Monomial

(iv) $-a$ - Monomial

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

(vi) $-3bc + d$ - Binomial

(vii) $1 + x + y$ - ~~Binomial~~ Trinomial

(viii) $1 + x \div y$ - Binomial

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

7. Coefficient of x :-

(i) $x = 1$

(iii) $-3x = -3$

(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) Numerical coefficients of the following :

(i) $5xy = 5$

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

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

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) $9 + 4x = 4x^3 = 3$

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

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

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

~~x~~