26/7/21 Swarit Nath 6B

Ex- 18(B)

1. Constants - 6, $\frac{5}{4}$ and 0 are constants.

Variables - $4x$, $-3x$, $\frac{4}{5}xy$, qz, $7p$, $\frac{9x}{y}$, $\frac{3}{4x}$ and $\frac{x^2}{3y}$.

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

(ii) $\frac{2}{3}xy, -4yx, yx$ and $2y^2, -\frac{2}{3}yz$ and $\frac{2y}{3}$

(iii) $-9b^2, 7b^2a, 2ab^2$ and $b^2a^2, -3a^2b^2$

(iv) $5qx, 7xa, \frac{2qx}{3}$ and $-5by, \frac{by}{7}$

3. (i) 16 is a consonant and y is a variable but 16^a is a variable. ✓ True

(ii) $5x$ has two terms 5 and x. ~~True~~ 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. ~~False~~ True

(vi) $8 \times ab$ is a binomial. False

(vii) $8 + ab$ is a binomial. ~~False~~ 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 $5x$. True

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

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

4. (i) $2a - b = 2$

(ii) $3x + \frac{a}{2} = 2$

(iii) $3x - \frac{x}{4} = 2$

(iv) $a \div x \times b + c = 2$

(v) $3x \div 2 + y + 4 = 3$

(vi) $xy \div 2 = 1$

(vii) $2x + y + 8 \div y = 2$

(viii) $2x+y+8+y=3$

(ix) $2x+3+b+9=3$

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) 5 and $5x$ are like terms. False

(vi) $3xy$ and $4xy^2$ 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) $1x \times x+y$ = Trinomial

(viii) Binomial : $1+x+y$

(ix) $1+xy-y^2$: Trinomial

7 (i) $x+1$ (ii) $-x-1$ (iii) -3

(iv) $-5a$ (v) $\frac{3}{5}y$ (vi) $\frac{2x}{y}=\frac{2}{y}$

(vii)

8 (i) $-3y^2$ (ii) $-a$ (iii) -1 (iv) $\frac{2}{9}$

(v) $-7z$ (vi) $-y^9$ (vii) $-3a$ (viii) $5a$

(ix)

9. (i) $5xy \cdot 5$ (ii) $abc = 1$

(iii) $+pqr = 5$ (iv) $\frac{-2x}{y} = -2$

(v) $\frac{2}{3}xy^2 = \frac{2}{3}$ (vi) $\frac{-15xy}{22y} = \frac{-15}{2}$

(vii) $-7x \div y = -7$ (viii) $-3x \div (2y) = \frac{-3}{2}$

10. (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) $1+4x=4x^3-3$ (vi) $8x^2y-3y^2+x^2+y^5=9$