5. State true or false.

(i) If $A = \{0\}$, then $|A| = 0$ False.

(ii) $|0| = 1$ False

(iii) If $T = \{a, 1, a, h, b, d, h\}$; then $|T| = 5$ True

(iv) If $B = \{1, 5, 51, 15, 5, 1\}$; then $|B| = 6$ False

HW 1-10

Ex. 1B (A)

2(i) $3x + 8 = 15$ (The sum of $3x$ and 8 is 15)

(ii) $7 - y > 2$ (y subtracted from 7 is greater than 2)

(iii) $2y - x < 12$ ($2y$ decreased by x is smaller than 12)

(iv) $5 \div z = 5$ (5 divided by z is equal to 5)

(v) $a + 2b > 10$ (The sum of a and $2b$ is greater than 10)

(vi) $2x - 3y = 16$ ($2x$ decreased by 3 is 16)

(vii) $3a - 4b) 14$ ($3a$ decreased by $4b$ is greater than 14)

(viii) $b + 7a < 21$ (The sum of b and $7a$ is smaller than 21)

(ix) $(16 + 2a) - x > 25$ (x subtracted from the sum of 16 and $2a$ is greater than 25)

x) $3x \times 12 - y < 3a$ (The sum of $3x$ and 12 decreased by y is smaller than $3a$)

Ex - 18 (B)

3. State true or false

i) 16 is a constant and y is a variable, but $16y$ is variable. ~~False~~ 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) $8 \times ab$ 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 ab in $-ab$ is -1. True

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

5. State true or false.

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) $-5a$ and $2ab$ are unlike terms. False

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

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

7. Write down the coefficient of x in the following monomials.

i) x — 1

ii) $-x$ — -1

iii) $-3x$ — -3

iv) $-5ax$ — $-5a$

v) $\frac{3}{2}xy$ — $\frac{3}{2}y$

vi) $\frac{ax}{y}$ — $\frac{a}{y}$