EXERCISE 18(A)

1. i) $8x + x = y$

ii) $8 - y$ $\quad x - 6 = y$

iii) $2 + x > y$

iv) $x + y < 2y$

v) $15 \times n = 3mn$

vi) $8xy = 3x$

vii) $30 - b = y$

viii) ~~$3x - z = y$~~ $\quad z - 3x = y$

ix) ~~$x \times 12 \ldots 5z$~~ $\quad x \times 12 = 5z$

x) $x \times 12 > 5z$

xi) $x \times 12 < 5z$

xii) $45 - 3z = y$

xiii) $8x - y = 2z$

xiv) ~~$8z$~~ $- 5x - 7y = 8z$

xv) $7y - 5x = 8z$

2. i) Sum of 3x and 8 is 5.

ii) 7 decreased by y is greater than x.

iii) x subtracted from 2y is less than 12.

iv) 5 divided by z is equal to 5

v) Sum of a and 2b is greater than 18.

vi) 3y subtracted from 2x is equal to 16

vii) 3a decreased by 4b is greater than 14.

viii) b increased by 7a is less than 21

ix) The sum of 6 and 2a decreased by x is greater than 25.

x) The sum of 3x and 12 decreased by y is less than 3a

Exercise 18(B)

1. Constants = $6, \frac{5}{4}, 0$

Variable = $4y, -3x, \frac{4}{5}xy, ab, 7p, \frac{9x}{y}, \frac{3}{4x}, -\frac{xz}{3y}$

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

Ans (9x, -x, $\frac{2}{3}x$), like terms

(-3y, $\frac{4}{5}y$ and y) - like terms

2. i) ($\frac{2}{3}xy$, -4yx, yx), (2yz, $-\frac{2}{3}yz$,

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

3. i) T ii) T iii) T iv) T v) T vi) T vii) T viii) T ix) T x) T xi) T xii) F

4. i) 2 ii) 2 iii) 2 iv) 3 v) 2 vi) 1 vii) 2 viii) 3 ix) 3

5. i) T ii) F iii) T iv) F v) F vi) T

6. i) monomial ii) binomial iii) monomial iv) monomial v) trinomial vi) binomial vii) trinomial viii) ~~x + y~~ binomial ix) trinomial

7. i) 1 ii) 1 iii) 3 iv) -5 v) $\frac{3}{2}$ vi) $\frac{a}{4}$

coefficient of x in following terms.

8. Coefficients of the following are:

i) $-3y^2$ ii) -a iii) -1

iv) $\frac{2}{a}$ v) $-2z$ vi) $-y^2$

vii) $-3a$ viii) $5a$

9- Numerical coefficients of the following monomials are:

i) 5 ii) 1 iii) 5 iv) -2

v) $\frac{2}{3}$ vi) -15 vii) 7 viii) $\frac{3}{2}$

10- Degree of the following polynomials is:

i) 2 ii) 2 iii) 10 iv) 20

v) 3 vi) 7 vii) 6 viii) 9