

2. For each of the following algebraic expressions, write a suitable statement in words :

i)  $3x + 8 = 15$  : The sum of  $3x$  and 8 is equal to 15.

ii)  $7 - y > x$  : 7 decreased by  $y$  is greater than  $x$ .

iii)  $2y - x < 12$  : 2 $y$  decreased by  $x$  is less than 12.

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

v)  $a + 2b > 18$  :  $a$  increased by  $2b$  is greater than 18.

vi)  $2x - 3y = 16$  : 2 $x$  decreased by  $3y$  is equal to 16.

vii)  $3a - 4b > 14$  : 3 $a$  decreased by  $4b$  is greater than 14.

viii)  $b + 7a < 21$  :  $b$  increased by  $7a$  is less than 21.

ix)  $(16 + 2a) - x > 25$  : The sum of 16 and  $2a$  decreased by  $x$  is greater than 25.

x)  $(3x + 12) - y < 3x$  : The sum of  $3x$  and 12 decreased by  $y$  is less than  $3x$ .

### 3. State True or false:

- 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)  $8 \times ab$  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  $y$  in  $-3xy$  is  $-3$ . 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)  $-ba$  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)  $\frac{ax}{y} = \frac{a}{y}$