

Ch-18 Fundamental Concepts

classmate

Date _____

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

i) $3x + 8 = 15 \rightarrow$ Sum of $3x$ and 8 is equal to 15 .

ii) $7 - y > x \rightarrow$ Difference between 7 and y is greater than x .

iii) $2y - x < 12 \rightarrow$ Difference between $2y$ and x is smaller than 12 .

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

v) $a + 2b > 18 \rightarrow$ Sum of a and $2b$ is greater than 18 .

vi) $2x - 3y = 16 \rightarrow$ Difference between $2x$ and $3y$ is equal to 16 .

vii) $3a - 4b > 14 \rightarrow$ Difference between $3a$ and $4b$ is greater than 14 .

viii) $b + 7a < 21 \rightarrow$ Sum of b and $7a$ is smaller than 21 .

ix) $(16 + 2a) - x > 25 \rightarrow$ Sum of 16 and $2a$ is decreased by x is greater than 25 .

x) $(3x + 12) - y < 3a \rightarrow$ Sum of $3x$ and 12 is decreased by y is smaller than $3a$.

Exercise - 1813

3) State whether true or false:-

i) 16 is a constant and y is a variable, but 16 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 x is $5x$ 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 whether 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) $x \rightarrow 1$

ii) $-x \rightarrow -1$

iii) $-3x \rightarrow -3$

iv) $-5ax \rightarrow -5a$

v) $\frac{3}{2}xy \rightarrow \frac{3}{2}y$

vi) $\frac{ax}{y} \rightarrow \frac{a}{y}$