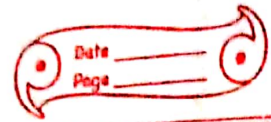


02/10/21

Theme - ALGEBRA

ch-18 - Fundamental Concepts



Exercise 18 (A)

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

i) $3x + 8 = 15 \rightarrow$ 8 added to $3x$ is equal to 15

ii) $7 - y > x \rightarrow$ y subtracted from 7 is greater than x

iii) $2y - x < 12 \rightarrow$ x subtracted from $2y$ is smaller than 12

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

v) $a + 2b > 18 \rightarrow$ $2b$ added to a is ~~eq~~ greater than 18.

vi) $2x - 3y = 16 \rightarrow$ $3y$ subtracted from $2x$ is equal to 16

vii) $3a - 4b > 14 \rightarrow$ $4b$ subtracted from $3a$ is greater than 14

viii) $b + 7a < 21 \rightarrow$ $7a$ added to b is smaller than 21

ix) $(16 + 2a) - x > 25 \rightarrow$ x subtracted from the ~~sum~~ ^{sum} of 16 and $2a$ is greater than 25.

x) $(3x + 12) - y < 3a \rightarrow$ y subtracted from the sum of $3x$ and 12 is smaller than $3a$.

Exercise 18 (B)

3- State whether true or false:

i) 16 is a constant and y is a variable, by 16 y is a variable. \rightarrow True

ii) $5x$ has two terms 5 and x . \rightarrow False

iii) The expression $5+x$ has two terms 5 and x . \rightarrow True

iv) The expression $2x^2 + x$ is a trinomial \rightarrow False

v) $ax^2 + bx + c$ is a trinomial. \rightarrow True

vi) $8xab$ is a binomial. \rightarrow False

vii) $8+ab$ is a binomial. \rightarrow True

viii) $x^3 - 5xy + 6x + 7$ is a polynomial. \rightarrow True

ix) $x^3 - 5xy + 6x + 7$ is a multinomial. \rightarrow True

x) The coefficient of x in $5x$ is $5x$. \rightarrow False

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

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

5. State whether true or false:

i) xy and $-yx$ are like terms. \rightarrow True

ii) x^2y and $-y^2x$ are like terms \rightarrow False

iii) a and $-a$ are like terms. \rightarrow True

iv) $-ba$ and $2ab$ are unlike terms \rightarrow False

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

vi) $3xy$ and $4xyz$ are unlike terms \rightarrow 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) $\frac{ax}{y} \rightarrow \frac{a}{y}$

_____ \times _____