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24/07/2021

Ex-18(B)

Q Ans 6, 5/4 and 0 are the constants
 $4y, -3x, (4/5)xy, a^2, 7p, 9x/y^3$
 $4x$ and $-x^2/3y$ are the variables

Q Ans i) $4x, -3y, -x, (2/3)x, (4/5)y$ and y
Here, the like terms are as follows
 $(3/3)xy, -4yx$ and $2y^2, (-2/3)y^2, 2y^2$

iii) $-ab^2, b^2a^2, 7b^2a, -3a^2b^2$ and $2ab^2$
Here, the like terms are as follows
 $-ab^2, 7b^2a, 2ab^2$ and $b^2a^2, -3a^2b^2$

iv) $5ax, 5by, 7x$ and $2ax/3$
Here, the like terms are as follows
 $5ax, 7x, 2ax/3$ and $5by, 7y$

Q Ans i) true vii) true

ii) false ix) true

iii) true x) false

iv) false xi) true

v) true

vi) false

vii) true

(9) i) $2a - b$

The no. of terms in given expression is two

ii) $3x + a/r$

The number of terms in given expression is two

iii) $3x - x/p$

The no. of terms in given expression is two.

iv) $a \div x \times b + c$

The no. of terms in given expression is two

v) $3x \div 2 + y + 4$

The no. of terms in given expression is three

vi) $xy \div 2$

The no. of terms in given expression is one.

vii) $x + y \div a$

The no. of terms in given expression is two

viii) $2x + y + 8 \div y$

The no. of terms in given expression is three

ix) $2xa + 3 \div b + 4$

The no. of terms in given expression is three

(5) i) true

v) false

ii) false

vi) ~~3x~~ true

iii) true

iv) false

i) xy

Here xy has one term
Therefore, xy is a monomial

ii) $xy + x$

Here $xy + x$ has two terms
Therefore, $xy + x$ is a binomial

iii) $2x \div y$, here $2x$ has one term, therefore
~~here~~ $2x \div y$ is monomial.

iv) $-a$

Here $-a$ has one term

v) $ax^2 - x + 5$

Here $ax^2 - x + 5$ has three terms
Therefore, $ax^2 - x + 5$ is a trinomial

vi) $-3bc + d$

Here $-3bc + d$ is a binomial

vii) $1 + x + y$

Here $1 + x + y$ has three terms
Therefore, $1 + x + y$ is a trinomial

viii) $1 + x \div y$

Here $1 + x \div y$ has three terms
Therefore, $1 + x \div y$ is a trinomial

i) x
The coefficient of x in the given monomial x is 1

ii) $-x$
The coefficient of x in the given monomial $-x$ is -1

iii) $-3x$
The coefficient of x in the given monomial $-3x$ is -3

iv) $-5ax$
The coefficient of x in the given monomial $-5ax$ is $-5a$

v) $\frac{3}{2}xy$:-
The coefficient of x in the given monomial is $(\frac{3}{2})y$

vi) ax/y
The coefficient of x in the given monomial is (a/y)

vii) x in $-3xy^2$
 $-3y^2$ is the coefficient of x in $-3x^2$

viii) x in $-ax$
 $-a$ is the coefficient of x in $-ax$

ix) y in $-y$
 -1 is the coefficient of y in $-y$.

iv) y in $(2/a)y$
 $(2/a)$ is the coefficient of y in $(2/a)y$

v) xy in $-2xyz$
 $-2z$ is the coefficient of xy in $-2xyz$

vi) ax in $-axy^2$
 $-y^2$ is the coefficient of ax in $-axy^2$

vii) x^2y in $-3ax^2y$
 $-3a$ is the coefficient of x^2y in $-3ax^2y$

viii) xy^2 in $5axy^2$
 $5a$ is the coefficient of xy^2 in $5axy^2$

9) i) $5xy$
 The numerical coefficient of the given monomial is 5

ii) abc
 The numerical coefficients of the given monomial is 1

iii) $5pqr$
 The numerical coefficient of the given monomial is 5

iv) $-2x/y$
 The numerical coefficient of the given monomial is -2

v) $(2/3)xy^2$

The numerical coefficient of the given monomial is $(2/3)$

vi) $-15xy/22$

The numerical coefficient of the given monomial is $(-15/22)$

vii) $-7x \div y$

The numerical coefficient of the given monomial is $-7 \div 1 = -7$

viii) $-3x \div (2y)$

The numerical coefficient of the given monomial is $-3 \div 2$ i.e. $(-3/2)$

ix) $x + x^2$

The degree of the polynomial is the greatest of sums of degree of two or more variables of the given polynomial $x + x^2$ is 2

Therefore, the degree of the given polynomial $x + x^2$ is 2

x) $5x^2 - 7x + 2$

The degree of the polynomial is the greatest of sums of degree of two or more variables of the given polynomial

Therefore, the degree of the given polynomial $5x^2 - 7x + 2$ is 2

iii) $x^3 - x^8 + x^{10}$

The degree of the polynomial is the greatest of sums of degree of two or more variables of the given polynomial

Therefore, the degree of the given polynomial $x^3 - x^8 + x^{10}$ is 10

iv) $1 - 100x^2$

The degree of the polynomial is the greatest of sums of degree of two or more variables of the given polynomial

Therefore, the degree of the given polynomial $1 - 100x^2$ is 2

v) $4 + 4x - 4x^3$

The degree of the polynomial is the greatest of sums of degree of two or more variables of the given polynomial

Therefore, the degree of the given polynomial $4 + 4x - 4x^3$ is 3

vi) $8x^2y - 3y^2 + x^2y^5$

The degree of the polynomial is the greatest of sums of degree of two or more variables of the given polynomial

Therefore, the degree of the given polynomial $8x^2y - 3y^2 + x^2y^5$ is 7

vii) $8z^3 - 8y^2z^3 + 7yz^5$

The degree of the polynomial is the ~~the~~ greatest of sums of degree of two or more variables of the given polynomial.

Therefore, the degree of the given polynomial $8z^3 - 8y^2z^3 + 7yz^5$ is 6.

viii) $4y^2 - 3x^3 + y^2x^7$

The degree of the polynomial is the greatest of sums of degree of two or more variables of the given polynomial.

Therefore, the degree of the given polynomial $4y^2 - 3x^3 + y^2x^7$ is 9.