

Algebraic Expression and Identities.

Exercise 6.1

Q.1 Identify the terms, their co-efficients for each of the following expressions.

(i) $7x^2yz - 5xy$

(ii) $x^2 + x + 1$

(iii) $3x^2y^2 - 5x^2y^2z^2 + z^2$

(iv) $9 - ab + bc - ca$

(v) $\frac{a}{2} + \frac{b}{2} - ab$

(vi) $0.2x - 0.3xy + 0.5y$

Solution:

	Terms	Co-efficients.
(i)	$7x^2yz$	7
	$-5xy$	-5
(ii)	x^2	1
	x	1
	1	1
(iii)	$3x^2y^2$	3
	$-5x^2y^2z^2$	-5
	z^2	1

Terms	Co-efficients
(iv) g	g
$-ab$	-1
bc	1
$-ac$	-1
(v) $\frac{a}{2}$	$\frac{1}{2}$
$\frac{b}{2}$	$\frac{1}{2}$
$-ab$	-1
(vi) $0.2x$	0.2
$-0.3xy$	-0.3
$0.5y$	0.5

Q2 Classify the following polynomials. as Monomials, Binomials, Trinomials. which polynomials do not fit in any category?

- (i) $x+y$ (ii) 1000 (iii) $x+x^2+x^3+x^4$
 (iv) $7+a+5b$ (v) $2b-3b^2$ (vi) $2y-3y^2+4y^3$
 (vii) $5x-4y+3z$ (viii) $4a-15a^2$ (ix) $xy+yz+zx+tx$
 (x) pqr (xi) p^2q+pq^2 (xii) $2p+2q$

Solution: (i) Binomial

(ii) Monomial

(iii) None of these

(iv) Trinomial

(v) Binomial

(vi) Trinomial

(vii) Trinomial

(viii) Binomial

(ix) None of these

(x) Monomial

(xi) Binomial

(xii) Binomial

aglasem