

4. Write the statements for the following expressions.

(a) $3x + 9$ (b) $71 - y$ (c) $z - y$ (d) $\frac{b}{4}$ (e) $51x$

(f) $\frac{2y}{x}$ (g) $y + a$ (h) zy (i) $3x + 5y$ (j) $6.xy$

Solution : -

(a) $3x + 9$

Nine is added with three times of x.

(b) $71 - y$

= y is subtracted from 71.

(i) $3x + 5y$

3 times of x added with 5 times of y

5. Identify the like and unlike terms and write them in the tabular form.

(a) $xy, yx, y, zx, z, 7xy, 78yx$ (b) $9y, -y, -3, -3x, z, -201y$

(c) $a, -50, -5b, -25a, -b, -12ab$ (d) $2.xy, 15yz, -5x, -15y$

Solution : -

(a) $xy, yx, y, zx, z, 7xy, 78yx$

Like terms	Unlike terms
$xy, yx, 7xy, 78yx$	y, zx, z

6. Write the terms and factors of the given algebraic expressions in the tabular form.

(a) $5a + 2b - 9c + 29abc$

(b) $y - 100x - 99yz - 9z$

(c) $q - 2p + r - 88 + qz$

(d) $x - y$

(e) $a - 2b - 3c$

(f) $5p - q + rs$

Solution : -

(a) $5a + 2b - 9c + 29abc$

<i>Terms</i>	<i>Factors</i>
$5a$	5 and a
$2b$	$2, b$
$-9c$	$- 3, 3, c$
$29ab$	$29, a, b$

(c) $q - 2p + r - 88 + qz$

<i>Terms</i>	<i>Factors</i>
q	q
$- 2p$	$-2, p$
r	r
$- 88$	$- 1, 2, 2, 2, 11$
qz	q, z

7. Write the coefficient of:

(a) a in $3ab$

(b) x in $-99xy$

(c) y in $-99xy$

(d) b in $3ab$

(e) c in $-141xyabc$

(f) s in $81pqs$

Solution : -

(a) a in $3ab$

Coefficient of a in $3ab = 3b$

(e) c in $-141xyabc$

Coefficient of c in $-141xyabc = -141xyab$

8. Write the constant term in the following expressions.

- (a) $3x + 3y - 9$ (b) $15 - a - 2b$ (c) $x + 21$
(d) $18x - 17y + 3$ (e) -91 (f) $x - 21y - 7$
(g) $y - 8 + 2x$ (h) $86 - xy$ (i) $4y + xz + 1$

Solution: -

(a) $3x + 3y - 9$

Constant term = -9

(e) -91

Constant term = -91

9. Identify monomials, binomials and trinomials in the following:

- (a) $3xy$ (b) $x - 7y$ (c) 13 (d) $15 - 7y - 2x$
(e) $89x - 20y$ (f) $100x$ (g) $151y$ (h) $121 - x - y$
(i) $a - b - c + d - e$ (j) $23x - 46x$ (k) $92y - 9$ (l) $144a - 12b$

Solution: -

(a) $3xy$ is a monomial

(b) $x - 7y$ is a binomial

(c) 13 is a monomial

(d) $15 - 7y - 2x$ is a trinomial

(e) $89x - 20y$

(f) $100x$

(g) $151y$

(h) $121 - x - y$

(i) $a - b - c + d - e$ is a multinomial (Polynomial with four terms)

(j) $23x - 46x$

(k) $92y - 9$

(l) $144a - 12b$