WORKSHEET CLASS 8

ALGEBRAIC EXPRESSIONS AND IDENTITIES

Q 1 Match the column.

Column I	column II
i) $x^2y + xy^2$	Polynomial
(ii) 564xy	Trinomial
(iii) algebraic coefficient of x in -25xyz	Monomial
(iv) $x^2 + x + 7$	Binomial
(iv) xy + yz + zp + px + 9xy	-yz

Q 2. The area of a square with side $5x^2y$ is

(i) $25x^2y$ (ii) $25x^2y^2$ (iii) $25x^4y^2$ (iv) $5x^2y^2$

Q 3. The area of a rectangle whose length and breadths are given as $3x^2y$ m and $5xy^2$ m respectively is

(i) $15x^2y^3$ m^2 (ii)$15x^3y^3$ m^2
(ii) $15x^3y^2$ m^2 (iv) $15x^2y^2$ m^2

Q 4. $(x + y + z)(x + y - z)$ is

(i) $x^2 + y^3 - z^2 + 2xy$ (ii) $x^3 + y^2 - z^3 + 2xy$

(iii) $x^2 + y^2 - z^2 + 2xy$ (iv) $x^2 + y^2 - z + 2xy$

Q 5. Simplify $(x^2- y^2)^2 + 4x^2y^2$

(i) $(x^2+ y^2)^3$ **(iii)** $(x^2- y^3)^2$

(ii) $(x^2+ y^2)^2$ **(iv)** $(x^2- y^2)^2$

Q 6. The value of x if $8x=35^2 -27^2$

(i) **62** **(ii) 26** **(iii) -62** **(iv) -26**

Q 7. (1.1m - 0.4) (1.1m + 0.4) is

(i) **$1.21m^2 - 0.16$** **(iii) $1.21m^2 -1.6$**

(ii) **$12.1m^2 - 1.6$** **(iv) $1.21m^2 - 16$**

Q 8. $(\frac{c^2}{4} - \frac{a^2}{4})$ is

(i) $(\frac{c}{2} - \frac{a}{2})(\frac{c}{2} - \frac{a}{2})$ (ii) $(-\frac{c}{2} - \frac{a}{2})(\frac{c}{2} - \frac{a}{2})$

(iii) $(\frac{c}{2} - \frac{a}{2})(\frac{c}{2} + \frac{a}{2})$ (iv) $(\frac{c}{2} - \frac{a}{2})(-\frac{c}{2} + \frac{a}{2})$

Q 9. Subtraction of $5x^2 - 6y^2 + 8y - 5$ from $7x^2 - 5xy + 10y^2 + 5x - 4y$

(i) $7x^2 + 5xy + 10y^2 + 5x + 4y$
(ii) $2x^2 - 5xy + 16y^2 + 5x - 12y +5$
(iii) $-2x^2 - 5xy + 16y^2 + 5x - 12y$
(iv) $2x^2 - 5xy + 16y^2 + 5x - 12y +5$

Q 10 . Identify the monomial , binomial and polynomials

$5x -14x,$ $3x^2,$ $-9x^2,$ $-2,$ $x^2 + x + 2,$

$xy -3xy,$ $a + b + c,$ $4x^3y^2 - 4x^2y^2z^2 + z^2 - 4xy^2 - y^2z^2.$

$x^2 + x + 2,$ $4x^2y^2 - z^2$

MONOMIAL BINOMIAL POLYNOMIAL
