St. Thomas school, Indirapuram
Level – 2 Worksheet
Class – 7 Algebraic expression

Q1) Find the value of: $x^2 – 1/5$ at x= -1.

Q2) What is the value of $x^2 + y^2 – 10$ at x = 0 and y = 0?

Q3) Simplify x(2x – 1) + 5 and find its value at x = -2.

Q4) Identify terms and factors in the expressions: $-ab + 2b^2 - 3a^2$

Q5) Identify terms which contain x and give the coefficient of x: $y^2x + x$

Q6) Subtract the sum of 13x - 4y + 7z and -6z + 6x + 3y from the sum of 6x - 4y - 4z and 2x + 4y - 7

Q7) From the sum of $3x^2 - 5x + 2$ and $-5x^2 - 3x + 9$ subtract $4x^2 - 3x + 9$

Q8) How much is $x^2 - 2xy + 3y^2$ less than $2x^2 - 3y^2 + xy$

Q9) Fill in the blanks: We get _____ when we subtract $(x - 2x^2)$ from 1

Q10) Add the following.
(i) ab – bc+ ac, bc – ca+ ab, ca – ab-2bc
(ii) p – q + pq, q – r + qr, r – p + pr , p+q+r
(iii) $2p^2q^2 – 3pq + 4$, $5 + 7pq – 3p^2q^2$,$4p^2q^2 + 10pq$
(iv) $a^2 + b^2$, $b^2 + c^2$, $c^2 + a^2$, 2ab + 2bc + 2ac

Q11) Choose the correct option: The exponents of a variable term in the polynomial is a:
a) integers b) negative integers
c) positive integers d) non -negative integers

Q12) The product of a monomial and trinomial will be a
a)monomial b)trinomial c)binomial d) None of these

Q13) Identify the type of expressions as monomial, binomial, trinomial and polynomial:
(i) $x^2y + xy^2$
(ii) 564xy
(iii) -8x + 4y
(iv) $x^2 + x + 7$
(iv) xy + yz + zp + px + 9xy

Q14) Simplify $7x^2(3x – 9) + 3$ and find its values for x = 4 and x = 6
Q15) Calculate the volume of a cuboidal box whose dimensions are
$5x \times 3x^2 \times 7x^4$