ST. THOMAS SCHOOL, INDIRAPURAM
WORKSHEET OF CH – (ALGEBRAIC EXPRESSION)

Q1) Expansion of -8(3a + 5b) yields
a) -24a - 40b b) -22a + 80b c) 20a - 30b d)-24a - 41b

Q2) Expansion and simplification of 8(3h - 4) + 5(h - 2) gives
a) 24h – 37 b) 36 - 4h c) 29h – 42 d) 38 + 42h

Q3) Simplify : 7b - 3b + 4
a) 10b + 4 b) 8b c) 4b + 4 d) -4b + 4

Q4) 9x + x - 4x + x gives:
a) 7x b) x^2 + 5x c) 5x d) -x2 + 5x

Q5) 6a - 3a - a – 12 is :
a) 3a - a - 12 b) 3a - 12 c) 2a - 12 d) 3a - 13

Q6) 8x - 3 + 4x - 3
a) 6 b) 6x c) 4x - 6 d) 12x - 6

Q7) Simplify the expression. -8(3y + 5) - 5
a) 24y + 35 b) -24y - 80 c) -24y d) -24y – 45

Q8) 8x + 4(x - 1) is:
a) 32x + 3 b) 12x - 4 c) 12x + 4 d) 9x – 4

Q9) Find the perimeter of the regular pentagon. Each side: (2x + 1) inches
a) (8x + 4) in. b) (12x + 6) in. c) (10x + 1) in. d) (10x + 5) in.

Q10) Simplify each of the following algebraic expressions by removing grouping symbols. $-a - [a + \{a + b - 2a - (a - 2b)\} - b]$
a) – 2b b) 2b c) 0 d) – 2ab

Q11) Simplify: 3x − 2y – xy − (x – y + xy) + 3xy + y − x

Q12) Solve: i) $4x^2y, -3xy^2, -5xy^2, 5x^2y$
ii) $3p^2q^2 - 4pq + 5, -10p^2q^2, 15 + 9pq + 7p^2q^2$

Q13) From the sum of 4 + 3x and 5 – 4x + $2x^2$, subtract the sum of $3x^2$ – 5x and –x^2 + 2x + 5.

Q14) What should be the value of p if the value of $2a^2+a-p=5$ equals to 5, when a=0 ?

Q15) Solve: Three times the sum of 2x + y – [5 – (x – 3y)] and 7x – 4y + 3 is subtracted from 3x – 4y + 7.

Q16) Take x^3-5x^2+3x+1, take away $6x^2-4x^3+5+3x$

Q17) How much is x – 2y + 3z greater than 3x + 5y – 7?

Q18) If P = $7x^2+5xy-9y^2$, Q = $4y^2-3x^2-6xy$ and R = $-4x^2+xy+5y^2$, find P + Q + R = ?.