CHRIST SCHOOL – RAJKOT
2019-2020

STD: 7 **Chapter: 7 worksheet**
SUB: Mathematics **Algebraic Expressions**

1. Fill in the blanks:

I. Subtracting x from zero results..... .
II. The coefficient of x in $-3xy^2$ is..... .
III. On adding 1 – x to x – 1, we get.....
IV. The value $x^2 - 3$ for x = 0 is..... .
V. Sum of $x^2 + y^2$ and – x — y^2 is.....
VI. The sum of two like terms is another..... Term.
VII. In the expression, 3 $m^2 - 9$, the term which is not constant is.....
VIII. 4 x^2 y + 6x^2y – 2xy^2 + 3 x^2y =.....

2. State whether the following statements are 'true' or 'false':

(i) The value of 2x2 is equal to (2+2)

(ii) A symbol having a fixed numerical value is called a constant.

(iii) Terms having same variable are called like terms.

(iv) Addition and subtraction operation also can be performed on unlike terms.

(v) An expression having one term is called polynomial.

(vi) If x = – 1, y = 2, then the value of $x^2 - 2y^2$ is 7.

(vii) The degree of the polynomial $15x^3 - 2xy + 7x^2$ is 2.

(viii) Letters used to represent numbers are called literals.

3. From the sum of $6a^2$-3a+2 and -$9a^2$+5a+6 subtract a^2+8a-4

4. From x^2+2x+1 take away 3x-2

5. Change the following algebraic expressions to statements in words

(1) 3(z+y) (2) 6y+5 (3) ab-(a+b)

ANSWERS

1. i.–X ii.-$3Y^2$ iii.0 iv.-3 v.x^2-x vi. Like vii. $3m^2$ viii.$13x^2y$-$2xy^2$
2. (i) true (ii) true (iii) true (iv) false (v) true (vi) false (vii) false (viii) true
3. -$4a^2$-6a+12
4. x^2-x+3
5. (1) Thrice the sum of z and y
   (2) 5 added to 6 times y
   (3) Sum of a and b is subtracted from product of a and b