HOLIDAYS HOME WORK-9CLASS

1. Indian Mathematicians

(i).Why BRAHMAGUPTA is famous ? Write at least five lines.

(ii).Write 3 to 4 lines about UJJAYINI.

2.Polynomial

(i).Can you identify the terms, variables and coefficients of this algebraic expression?

(a).$4x + 5y + 3$,

(b).$200l + 160w + 50lw$

(ii). Write polynomials of degrees 1, 2 and 3.

(iii). What are the coefficients of x^2 and x^3

In the polynomial $x^4 – 3x^3 + 6x^2 – 2x + 7$?

(iii). Find the value of the linear polynomial $5x – 3$ if:

(a)$x = 0$ (b)$x = –1$ (c) $x = 2$

3.Word Problems (Linear Decay)

().A mobile phone is bought for ₹10,000. Its value decreases by ₹800 every year.

(i).Find the value of the phone after 3 years.

(ii). Make a table of values for t varying from 0 to 8 years and show how the value of the phone, v, depreciates with time.

(iii) . Find an expression that relates v and t, and explain why it represents linear decay.

4.Rational Numbers

(i).Represent the rational numbers 2/3, -5/4,11/2 on a single number line.

(ii).Find :

(a).2/5 + 3/10

(b).2/5 – 3/10

(c).2/5 × 3/10

(d).2/5 ÷ 3/10

5.Identities

Using the identity $(a + b)^2 = a^2 + 2ab + b^2$

, expand the following:

(i) $9x^2 + 24xy + 16y^2$

(ii) $4s^2 + 20st + 25t^2$