Pt.Yad Ram Secondary Public School

Thana Road, Bhajanpura, Delhi -53

Xth - Maths

Worksheet – Chapter 5 (Arithmetic Progression)

Q1. Which term of the AP: 65, 61, 57,……..is the first negative term?

Q2. The sum of first 15 terms of an AP is 750 and its first terms is 15. Find its 20th term.

Q3. Find how many integers between 200 and 500 are divisible by 8?

Q4. If pth term of an AP is $\frac{1}{q}$ and qth term is $\frac{1}{p}$, prove that the sum of first pq terms of the AP is $\frac{pq+1}{2}$.

Q5. The 4th term of an AP is zero. Prove that the 25th term of the AP is three times its 11th term.

Q6. If the sum of first n terms of an AP is $\frac{1}{2}(3n^2 + 7n)$, then find its nth term.

Q7. The digits of a positive integer, having three digits are in AP and their sum is 15. The number obtained by reversing the digits is 594 less than the original numbers. Find the number.

Q8. Find the middle term of the term of the AP: 6, 13, 20,…….216.

Q9. A sum of ₹ 4000 is to be used to give 10 case prize to students of a school, for their overall academic. If each prize is ₹ 50 less than its preceding prize, find the value of each prize. Which value are developed in students by prize giving?

Q10. A factory produced 80, 000 cars in the 4th year and 11000 cars in the 7th year. Assuming that the production increases by a fixed number every year, find the number of cars produced in the first 15 years.