

# Abstract

In this proposed research, we will discuss the analytic view of Chevalley groups  $A_1(4)$  and  $A_2(2)$  by dealing with their structure, order, element's orders, Sylow's  $p$ -subgroups. Further, we have discussed the conjugacy classes of  $A_2(2)$  and its class equation. Also, we have discussed the characterization of Chevalley groups  $A_1(4)$  and  $A_2(2)$  which is based on the sum of orders of elements [1] which gives the information about their relations with other non-simple groups of the same order and higher order.