

Abstract

In this project of research, we will study the first order linear partial differential equation for homogeneous sand and homogeneous types. In these equations we deal with "boundary value problem" and solving it by using iteration method of Adomian decomposition which is in the most times gives the exact solution of the equations. The kind of these equations can apply to model the traffic flow on a crowded road, flow in of blood through an elastic walled Tube and shock waves which are special case of dynamics system. In this Text, we will discuss two chapters, which be necessary in our work in chapter one, we will show the basic concepts which is needed in our studying. Chapter two, we will study the above equation and the solving it by using the above method and we will give some examples of using it.

Finally, we will show the references of our work.