

Homework 1

1. Find the no. of vehicles per kilometer of a highway, if the average speed of vehicle is 55 Km/hr and the time between two successive vehicles is 3 sec/veh.
2. Two sets of vehicles are timed over a kilometer section long and flows are also recorded. In the first set, four vehicles take 53, 56, 63 and 69 seconds when the flow is 1500 veh/hr. In the second set, four vehicles take 70, 74, 77 and 79 seconds when the flow is 1900 veh/hr.

Estimate average speed and density at flow rate of 2000 veh/hr.

Please submit your answer by 7/4/2020