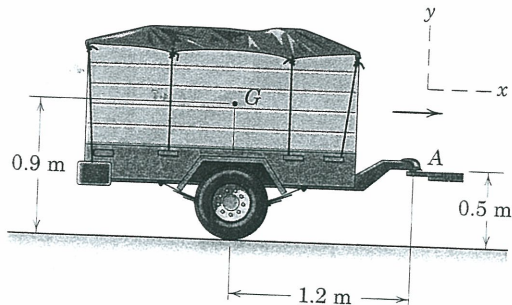6/21 The loaded trailer has a mass of 900 kg with center of mass at G and is attached at A to a rear-bumper hitch. If the car and trailer reach a velocity of 60 km/h on a level road in a distance of 30 m from rest with constant acceleration, compute the vertical component of the force supported by the hitch at A. Neglect the small friction force exerted on the relatively light wheels.

Ans. $A_y = 1389$ N

Problem 6/21