

(a) Show that $d = 100$. [3]

[illegible]

Car *B* starts off at the same instant as car *A*. The two cars arrive at *P* simultaneously and with the same speed. The engine of *B* produces a driving force of 3200 N and the car experiences a constant resistance to motion of 1200 N.

- (b) Find the mass of B . [3]

[illegible]

- (c) Find the steady speed which B can maintain when its engine is working at the same rate as it is at P . [3]

[illegible]