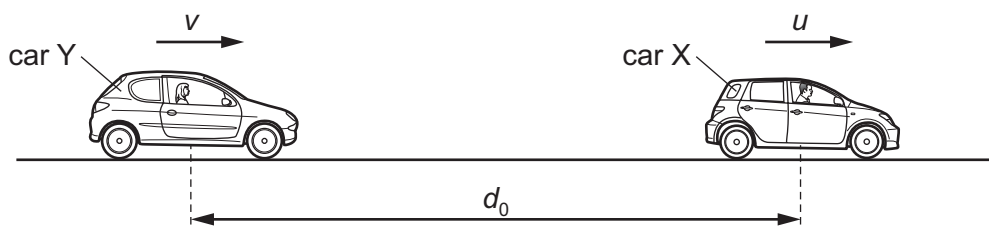


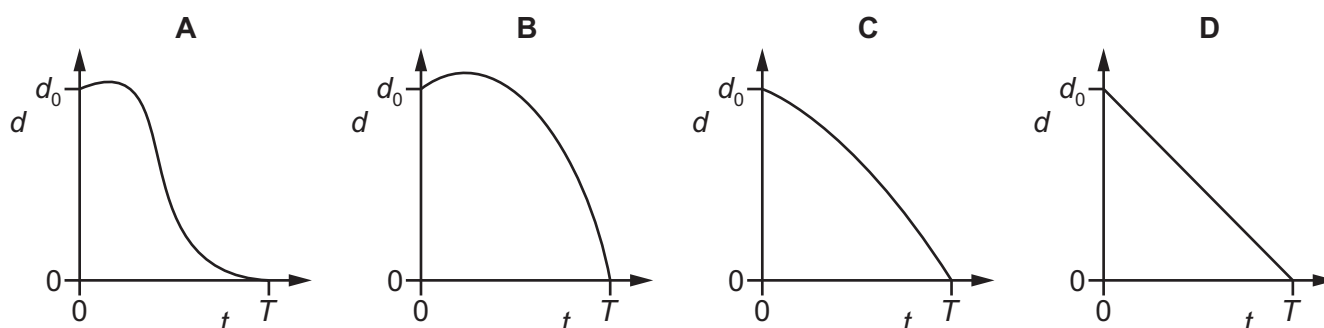
- 6 A car X is travelling at a constant speed u along a straight road. At time $t = 0$ a second car Y is a distance d_0 behind car X and travelling at a speed v in the same direction. Speed v is less than speed u .



At time $t = 0$ car Y begins to accelerate with a constant acceleration.

Car Y overtakes car X at time $t = T$.

Which graph could best show the variation with time t of the distance d between the cars?



- 7 The resultant force acting on an object is slowly increased.

Which graph could show the variation with time t of the momentum p of the object?

