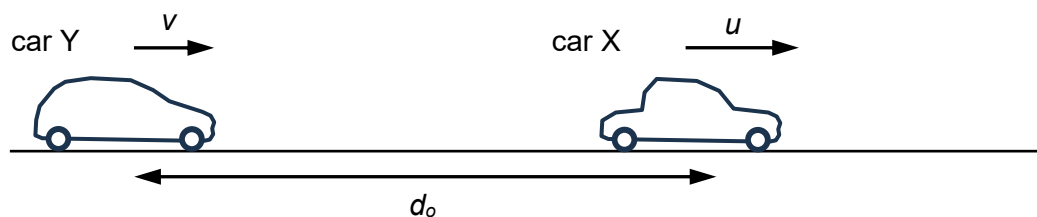


- 2 A car X travels at constant speed u along a straight road. At time $t = 0$, a second car Y is a distance d_0 behind car X and travels at a speed v in the same direction. Speed v is less than speed u .



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

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

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

