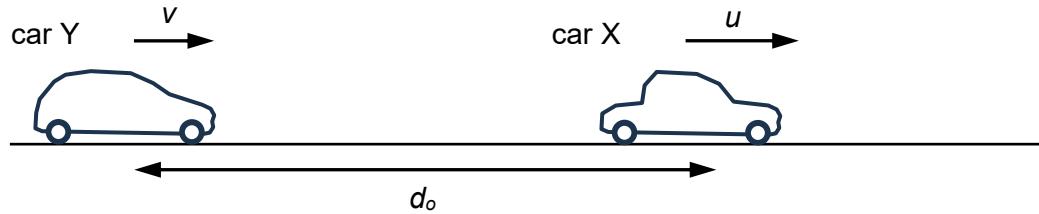


- 2 A car X travels at constant speed  $u$  along a straight road. At time  $t = 0$ , a second car Y is a distance  $d_0$  behind car X and travels at a speed  $v$  in the same direction. Speed  $v$  is less than speed  $u$ .



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?

