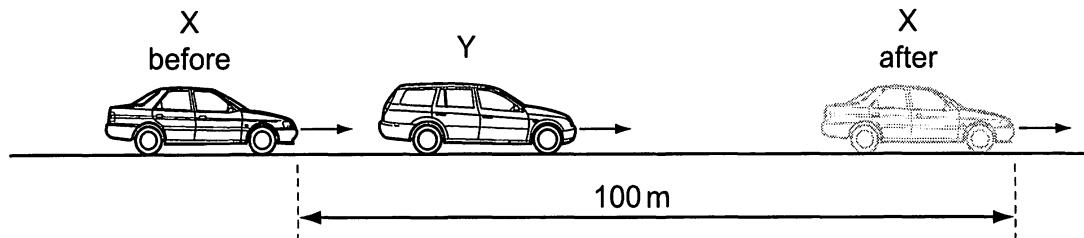


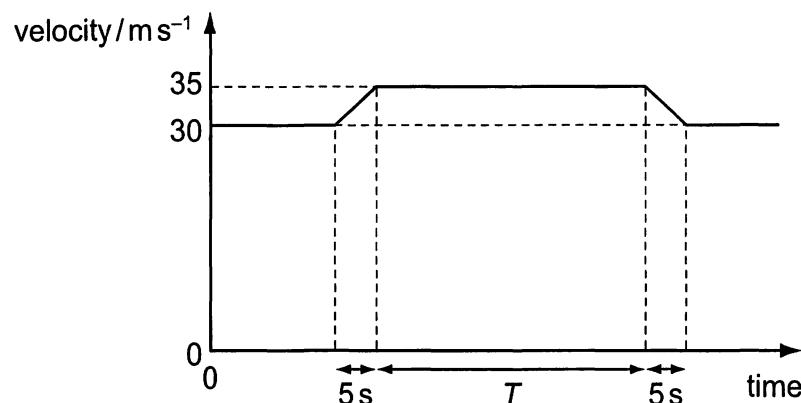
- 5 Two cars X and Y are initially travelling at 30 m s^{-1} on a straight motorway.

X overtakes Y by accelerating for 5 s to 35 m s^{-1} , remaining at 35 m s^{-1} for a time T and then decelerating for 5 s to 30 m s^{-1} .

X advances by 100 m relative to Y during overtaking.



The diagram shows the velocity-time graph for X.



What is time T ?

- A 10 s B 15 s C 20 s D 25 s