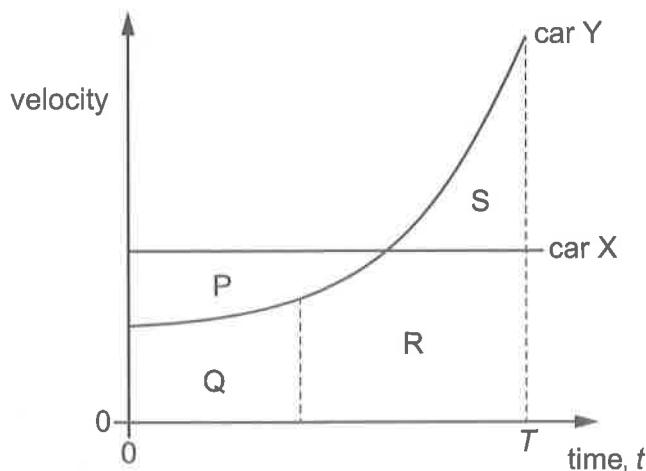


- 4 The velocity–time graph shows car X travelling with a constant velocity and car Y travelling with increasing acceleration. Car X overtakes car Y at time  $t = 0$ .



Four areas P, Q, R and S are labelled on the graph.

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

Which relationship must be correct?

A  $P = S$

B  $R = S$

C  $P + Q = R$

D  $Q + R = P + S$

