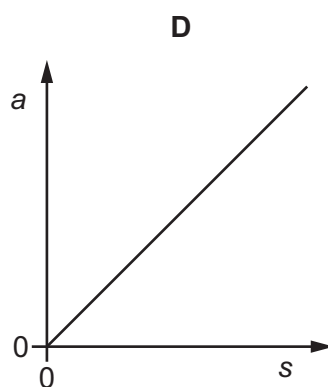
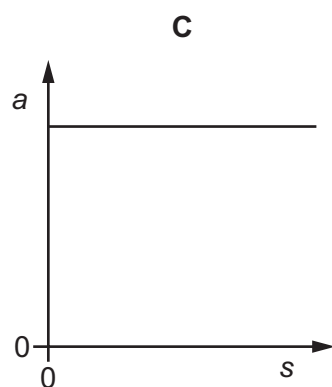
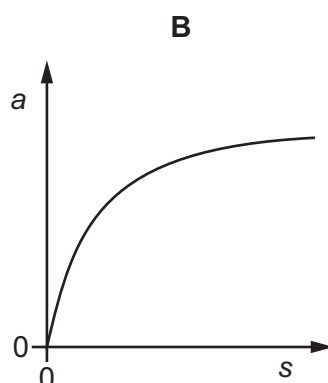
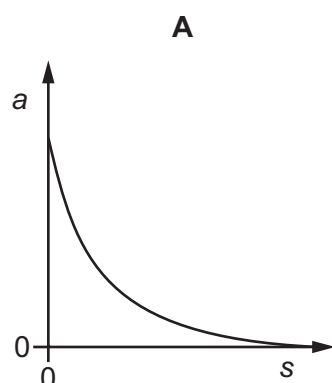


- 9 A skydiver leaves a stationary balloon and falls vertically through a long distance.

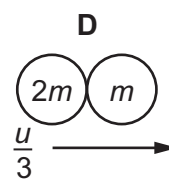
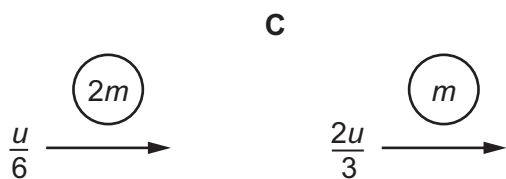
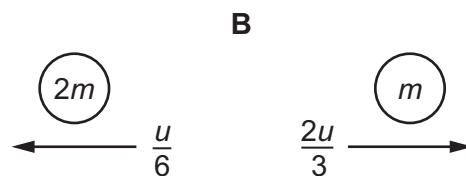
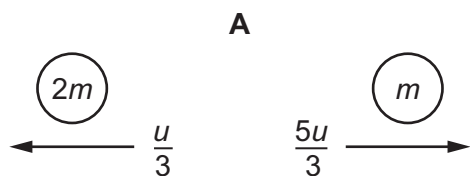
Which graph best represents the variation of the acceleration  $a$  of the skydiver with the distance  $s$  travelled as she falls through the air?



- 10 The diagram shows two spheres approaching each other head-on. Each sphere has speed  $u$ . One sphere has mass  $2m$  and the other has mass  $m$ .



Which diagram shows the result of a perfectly elastic collision?



the spheres stick together