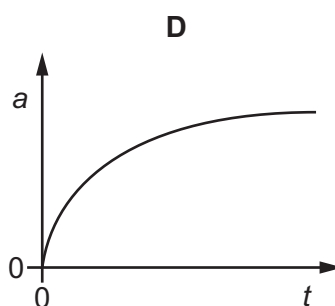
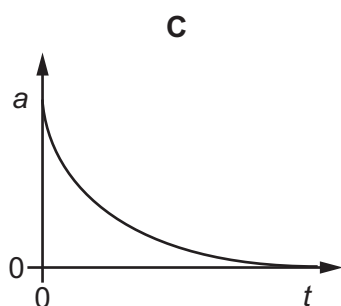
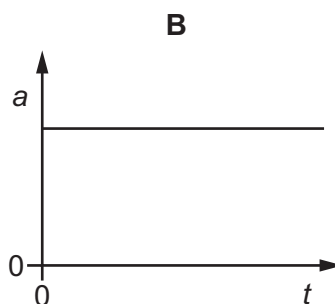
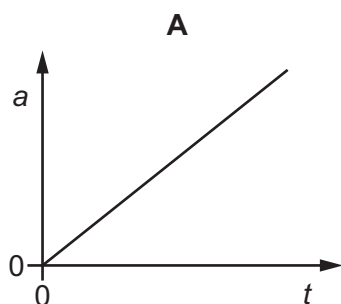


- 10 A beach-ball falls vertically from a high hotel window. Air resistance is **not** negligible.

Which graph shows the variation with time  $t$  of the acceleration  $a$  of the ball?



- 11 A car has mass  $m$ . A person needs to push the car with force  $F$  in order to give the car acceleration  $a$ . The person needs to push the car with force  $2F$  in order to give the car acceleration  $3a$ .

Which expression gives the constant resistive force opposing the motion of the car?

**A**  $ma$

**B**  $2ma$

**C**  $3ma$

**D**  $4ma$