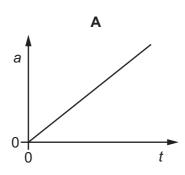
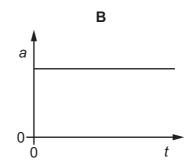
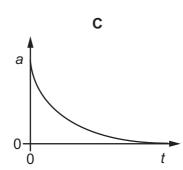
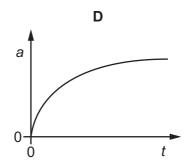
10 A beach-ball falls vertically from a high hotel window. Air resistance is **not** negligible.

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** 2*ma*
- **C** 3*ma*
- D 4ma