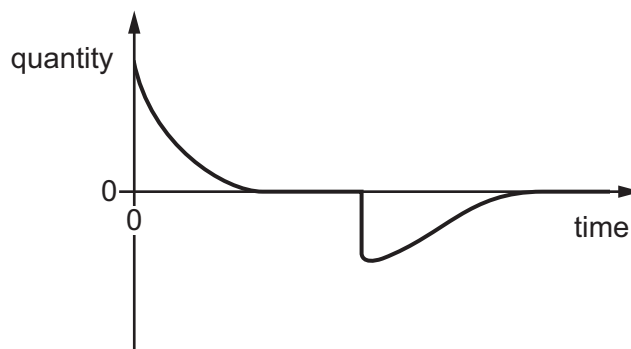


- 8 The graph shows how a physical quantity varies with time.



Which event could best be represented by the graph?

- A the acceleration of a firework rising to a maximum height and falling to the ground
 - B the acceleration of a skydiver leaving an aircraft, falling, opening a parachute and falling to the ground
 - C the speed of a javelin as it leaves an athlete's hand, falls and sinks into the ground
 - D the speed of a high jump athlete leaving the ground, jumping over a bar and descending to the ground
- 9 What describes the mass of an object?
- A the force the object experiences due to gravity
 - B the momentum of the object before a collision
 - C the resistance of the object to changes in motion
 - D the weight of the object as measured by a balance
- 10 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 $4ma$