What is the kinetic energy of a car of mass 1500 kg travelling at a speed of 65 mi / hr ?

Given:

Mass of the car: m =1500 kg

Speed of the car: v = 65 mi/hr = 29 m/s

Determine: kinetic energy of the car:KE

$KE = (½)mv^2$ ----------(1)

Substituting for m and v in (1):

$$\mathbf{KE = (½) \times 1500 \times (29)^2 = 6.3 \times 10^5\ J}$$