



- 2 An object X of mass 4.85 kg travelling forwards with a speed of 7.30 ms^{-1} collides head on with a stationary object Y of mass 3.08 kg .

After the collision, Y moves off in the forward direction with a speed of 4.61 ms^{-1} .

Calculate

- (a) the speed of X after the collision,

speed = ms^{-1} [2]

- (b) the decrease in the total kinetic energy as a result of the collision.

decrease = J [2]

[Total: 4]

