

## Mark Scheme (Results)

January 2019

Pearson Edexcel International GCSE In Physics (4PH0) Paper 2P

Question number	Answer	Notes	Marks
9 (a) (i)	momentum = mass × velocity;	allow rearrangements and standard symbols e.g. p = m × v reject m for momentum	1
(ii)	substitution and evaluation; e.g. $(p =) 0.039 \times 0.56$ $(p =) 0.022 (kgm/s)$	0.02184 (kgm/s) allow 0.02 (kgm/s) if supported by working	1
(iii)	use of conservation of momentum;	allow 'momentum before = momentum after' seen anywhere can also be implied from calculation	3
	evaluation of total mass; evaluation of mass of truck;		
	e.g. 0.022 = m × 0.26 total mass = 0.084 mass of truck = (0.084 – 0.039 =) 0.045 (kg)	allow ecf from (ii) allow 0.0846(kg) allow 0.0456(kg)	
(b)	total mass (of system) is now greater; total momentum is the same as before; velocity will be lower than before;	allow "momentum is conserved"  calculation of new velocity = 0.169 m/s scores all 3 marks	3

Total for question 9 = 8 marks