Question number			Answer	Notes	Marks
6	(a)	(i)	momentum = mass x velocity;	words or correct symbols p = m x v reject M for momentum	1
		(ii)	substitution; evaluation; e.g. (p =) 0.50 x 3.1 (p =) 1.6 (kg m/s)	ignore - signs allow 1.55 1 mark max for 1.5	2
		(iii)	substitution into correct equation; evaluation; e.g. F = 1.55(- 0) ÷ 0.070 (F =) 22 (N)	no mark for equation as given in paper allow ECF from (ii) ignore - signs allow F in range 22-23 (N) inclusive allow method using F=ma.	2
	(b)		any two of: MP1. (forces) equal; MP2. (forces) opposite OR up <u>and</u> down; MP3. mention of Newton's <u>third</u> law;	ignore references to balanced forces 'every action has an equal and opposite reaction' scores 2 marks	2
	(c)		any two of: MP1. pressure is force / area; MP2. forces (on wood and hammer) are equal; MP3. smaller area of nail is in contact with wood / ORA;	allow pressure is inversely proportional to area award if clear which end of the nail has the smaller area	2

Total 9 marks