Que	estion	Scheme	Marks	AOs	
1	(a)	speed m s ⁻¹ 18 16 V 0 0 5 20 25 Time (s) Shape Figures: V, 16, 18, 5, 20, 25	B1 B1	1.1b 1.1b	
(b)		Complete method to find the value of <i>V</i>	(2) M1	3.4	
(8)		$\left(\frac{1}{2}(18+V)\times 5\right) + 15V + \left(\frac{1}{2}(V+16)\times 5\right) = 325$	A1	1.1b	
			A1	1.1b	
		V = 12	A1	1.1b	
		10, 12	(4)		
(c)		$\frac{18-12}{5}$	M1	3.1b	
		$1.2 (\mathrm{m s^{-2}})$	A1	1.1b	
			(2)		
			(8 marks)		
Notes:					
(a)	B1	Overall shape			
	B1	Figures marked clearly (allow delineators where appropriate)			
(b)	M1	Total area = 325 oe to produce an equation in V only (must have correct number of sections with appropriate number of $\frac{1}{2}$'s)			
	A1	Correct equation with at most one error			
	A1	Correct equation			
	A1	cao			
(c)	M1	Correct method (allow subtraction reversed) using their V			
	A1	cao (must be positive)			