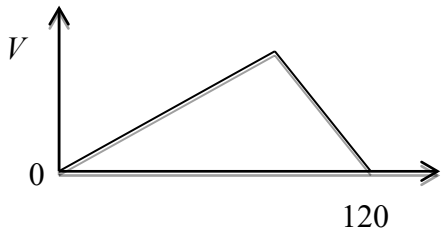
Question	Scheme	Marks	AOs
2(a)	 Shape	B1	1.1b
	V, 120	B1	1.1b
		(2)	
(b)	$\frac{1}{2} \times 120V = 1500$	M1	3.1b
	$V = 25$	A1	1.1b
		(2)	
(c)	Area of triangle = Distance travelled = $(\frac{1}{2} \times 120V)$ = 1500	B1	2.4
	This does not depend on T so T can take any value where $0 < T < 120$	B1	2.4
		(2)	
(d)	Include a constant speed phase in the motion	B1	3.5c
		(1)	
			(7 marks)

Notes:

(a)

B1: Triangle, starting at the origin with base on axis and apex between $t = 0$ and $t = 120$

B1: V and 120 correctly marked (allow a delineator)

(b)

M1: Identifying correct strategy to solve problem to give equation in V only

A1: $V = 25$

(c)

B1: Area of triangle only depends on base and height

B1: So T can take any value $0 < T < 120$

(d)

B1: e.g. Include a *smooth* change from acceleration phase to deceleration phase.
e.g. Have a variable acceleration and/or deceleration phase