Question	Answer	Marks	Guidance
(a)	$200 = \frac{(0+25)}{2}t$	**M1**	For use of $s = \frac{(u+v)}{2}t$ or other complete method to find t e.g. $v^2 = u^2 + 2as$ followed by $v = u + at$ N.B. $a = 1.5625$
	$t = 16$ s	**A1**	
		2	
(b)	Trapezium	**B1**	Through (0, 0) and positive t-axis
	All correct through (0, 0), (16, 25), (32, 25), (37, 0)	**B1**	FT *their* value of t from part **(a)** (t +16 + 5)
		2	
(c)	Total distance = $200 + 400 + \frac{1}{2} \times 25 \times 5$ [= 662.5]	**M1**	Or trapezium $\frac{1}{2} \times 25(16+37)$[= 662.5] Or $200 + 400 + \frac{25+0}{2} \times 5$ Allow *their* value of t from part **(a)** in calculating 200 and *their* time from the constant speed section from part **(b)** in calculating 400 Allow *their a* from part **(a)** if used in calculating 200
	Average speed = $\frac{662.5}{37} = 17.9$ ms^{-1} (3 s.f.)	**A1**	Allow $\frac{1325}{74} = 17\frac{67}{74}$
		2	