

Question number	Answer	Notes	Marks
3 (a) (i)	$\times 1600$ seen in working OR $\div 3600$ seen in working; speed = 179 (m/s);	allow $\div 60^2$ allow any answer that would round to 179 condone 180 NB $1600 \times 403 = 644800$	2
(ii)	idea of measuring time taken (to travel between markers); use of appropriate instrument to measure time; use of speed = distance / time;	allow stopwatch, timer, (stop)clock, light gates condone any subject of equation.	3
(b)	length of arrow equal to given arrow; arrow drawn horizontally to the left; <b>arrow labelled “air resistance”;</b>	ignore vertical arrows judge by eye allow drag, friction ignore wind resistance	3

Total for Question 3 = 8 marks