

Question 2 (Total 4 marks)

Part	Working or answer an examiner might expect to see	Mark	Notes
(a)	$(\frac{1}{2} \times 2)(2 + 26 + 2 \times (7 + 9 + 13 + 22))$	M1	This mark is given for a method to use the trapezium rule as an approximation to the area under the curve
		M1	This mark is given for a correct terms used for the trapezium rule
	130 m	A1	This mark is given for a correct estimate of the length of the runway
(b)	An overestimate since the area of the five trapezia is greater than the area under the curve	B1	This mark is given for a valid explanation