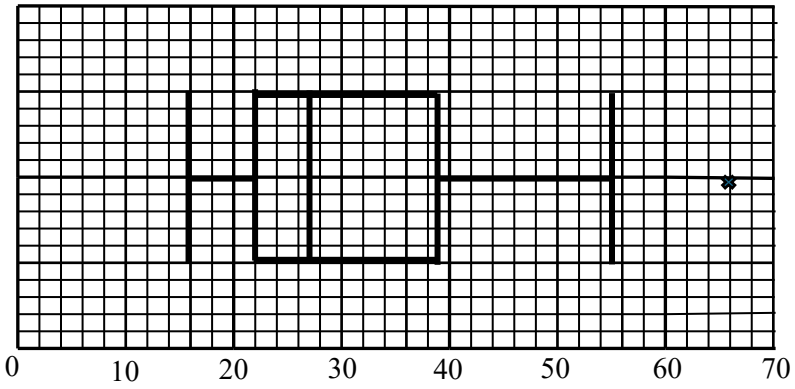
Question Number	Scheme		Marks
2(a)(i)	Median = 27		B1
(ii)	IQR = 39 – 22 = 17		M1 A1
			(3)
(b)	[22 – 1.5 × "17" = – 3.5 and] 39 + 1.5 × "17" = 64.5		M1
	So 66 is the only outlier		A1
			M1 M1 A1ft
			(5)
(c)(i)	$\frac{115}{23}[=5]$	115 + 200 × 23 [=4715]	M1
	200 + "5" = 205	$\frac{"4715"}{23} = 205$	M1A1
(ii)	$\sqrt{\frac{4623}{23} - "5"^2}$	$\sqrt{\frac{4623 + 400 \times "4715" - 23 \times 40000}{23} - "205"^2}$	M1
	= awrt 13.3		A1
			(5)

	Notes		Total 13
(a)	**B1**	Cao	
	M1	for 39 – *a* where *a* < 27 or *b* – 22 where *b* > 27 May be implied by IQR = 17	
	A1	Cao	
(b)	**M1**	for a correct method to find the upper outlier boundary	
	A1	for 66 identified as the one outlier **NB** If no working shown then 66 (only) marked on the box plot implies M1A1	
	M1	box with 2 whiskers	
	M1	lower whisker plotted at 16 or upper whisker at 55/64.5 (ft their upper outlier boundary) Allow ½ square tolerance	
	A1ft	fully correct with 1 outlier ft Q1, Q2 and Q3 Allow ½ square tolerance	
(c)(i)	**M1**	for $\frac{115}{23}$ May be implied by 5 or 115 + 200 × 23 May be implied by 4715 or $\bar{x} = 205$	
	M1	for adding their 5 to 200 or dividing their 4715 by 23 May be implied by 205	
	A1	Cao	
(ii)	**M1**	for a correct method to find the standard deviation	
	A1	awrt 13.3 Allow $\sqrt{176}$ oe e.g. $4\sqrt{11}$	