

Question		Answer	Marks	AO	Guidance
14	(a)	not all the data were available	B1	2.4	LDS advantage must refer to data not being available or reference to #N/A
			[1]		
14	(b)	$57.7 - 1.5 \times (82.05 - 57.7)$ or $82.05 + 1.5 \times (82.05 - 57.7)$ seen outliers < 21.175 or outliers > 118.575 (hence all outliers in interval) (118.575,132.2] (since no outliers in lower tail)	M1	1.1	
			A1	2.2a	given correct to 1 dp or better; both regions needed; allow non-strict inequalities
			A1	2.2a	allow eg between 118.6 and 132.2 allow strict or non-strict inequalities
					if M0 allow SCB1 for both regions outliers < 21.175 or outliers > 118.575 unsupported; allow SCB2 for all outliers in (118.575,132.2] unsupported
			[3]		
14	(c)	should not be removed since no reason to eg doubt that it's genuine data eg suspect it's been misrecorded eg doubt since from (US) government	B1	2.4	LDS advantage
			[1]		
14	(d)	a typical man is heavier than a typical woman, [since $79.9 > 69.5$]	B1	2.2b	allow eg an average man is heavier than an average woman
					do not allow eg men are heavier than women on average
			[1]		

Question		Answer	Marks	AO	Guidance
14	(e)	<p>mean weight for men is greater than mean weight for women, so distribution for men is located further along the number line than the distribution for women (by about 10 kg) oe</p>	B1	2.4	allow mean weight for men greater than mean weight for women , so men are heavier than women (by about 10 kg) oe
		<p>standard deviations (or variances) are approximately equal, so similar dispersion about the mean / variation in weights for men and women oe</p>	B1	2.2a	must refer to standard deviation or variance
			[2]		