

Question			Answer	Marks	AO	Guidance	
7	(a)		N(178, 8 ²) and X < 194 oe	M1	1.1	soi	
			P(X < 194) = 0.977(249868...)	A1	1.1	BC	
			0.977249868... ³ = 0.933 (3 s.f.)	A1	1.1		
			[3]				
7	(b)		E.g. inflection – mean	M1	1.1a	E.g. 170 – 163	Figures are illustrative only
			E.g. $\frac{1}{2}$ (97.5th percentile – mean)			E.g. $\frac{1}{2}(176 - 163)$	
			E.g. $\frac{1}{6}$ (99.7th percentile – 0.3th percentile)			E.g. $\frac{1}{6}(183 - 145)$	
			= 6 to 7	A1	1.1		
			E.g. Point of inflection is 1 sd from mean	E1	2.4	Statement matching method used	
			E.g. 95% of values within (approx) 2 sds of mean				
			E.g. Almost all within (approx) 3 sds of mean				
				[3]			