

Q	Marking instructions	AO	Marks	Typical solution
16(a)(i)	Obtains correct mean AWFW [0.053, 0.054]	1.1b	B1	Mean = $\frac{128.657}{2405} = 0.053496$
	Subtotal		1	

Q	Marking instructions	AO	Marks	Typical solution
16(a)(ii)	Obtains a value of the standard deviation in the range [0.0265, 0.0285]	1.1b	B1	$\text{Sd} = \sqrt{\frac{8.701707}{2405} - \left(\frac{128.657}{2405}\right)^2}$ $= \sqrt{0.00075639}$ $= 0.0275$
	Obtains value of the standard deviation AWRT 0.0275	1.1b	B1	
	Subtotal		2	

Q	Marking instructions	AO	Marks	Typical solution
16(b)(i)	States that the claim is/may be incorrect. With a valid reason Eg Not every make of car is included in the LDS LDS does not reflect number of electric, gas/petrol in UK database Not every region is included in the LDS LDS only comes from 2 years LDS is a small sample compared to the entire UK database	2.2b	E1	The LDS does not include cars from every region of the UK, so the claim may be incorrect.
	Subtotal		1	

Q	Marking instructions	AO	Marks	Typical solution
16(b)(ii)	States CO ₂ , CO or NOX	1.2	B1	CO ₂
	Subtotal		1	

	Question 16 Total		5	
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