Question Number	Scheme	Marks
1 (a)	$2\times 36 = 72 \quad 8\times 4 = 32$	M1 A1
		(2)
(b)	$[13]+\dfrac{(204-184)}{120}\times 2$ $\quad$ $[13]+\dfrac{(204.5-184)}{120}\times 2$	M1
	$= \dfrac{40}{3} =$ awrt 13.3	A1
		(2)
(c)	Symmetrically distributed/No skew as the mean ≈ median	B1
		(1)
(d)	$\dfrac{32}{4}+152+\dfrac{120}{2}\left[=220\right]$	M1
	$\dfrac{'220'}{408}\times\dfrac{'219'}{407}$	M1
	$\dfrac{365}{1258}$ or 0.2901… awrt 0.29	A1
		(3)

		Notes	**Total 8**
(a)	**M1**	For any equivalent method to find either frequency Maybe implied by either correct frequency Also maybe implied by two frequencies which add to 104 Also maybe implied by a correct scale on the fd axis , at least 3 labels	
	A1	For 72 and 32	
(b)	**M1**	For any equivalent method to find the median e.g. $\dfrac{Q_2-13}{15-13}=\dfrac{204-184}{304-184}$ or $\dfrac{15-Q_2}{Q_2-13}=\dfrac{304-204}{204-184}$ allow working downwards $[15]-\dfrac{(304-204)}{120}\times 2$	
	A1	awrt 13.3	
(c)	**B1**	For a correct identification of skew [which must either be symmetric/no skew or (slight) negative skew] with a correct supporting reason. Condone mean < median so negative skew Allow use of 'their median' in the comparison provided 'their median' … 13.2 Allow Q_1 = awrt 10.8 or awrt 10.9 **and** Q_3 = awrt 15.1 **and** $Q_2 - Q_1 > Q_3 - Q_2$ so negative skew. Comments referring only to the diagram (being symmetrical therefore no skew) send to review	
(d)	**M1**	For a correct method to find the number of plants between 8cm and 14cm (may be implied by sight of 220)	
	M1	For $\dfrac{n}{408}\times\dfrac{n-1}{407}$ or $\left(\dfrac{n}{408}\right)^2$ with 210 ,, n ,, 230	
	A1	awrt 0.29 may see $\dfrac{3025}{10404}$ from $\left(\dfrac{220}{408}\right)^2$	