

1	(a)	365	M1	\bar{x} with x consistent within intervals eg 200×1 , 300×11 , 400×5 , 500×0 , 600×3 , if 200, 3300, 2000, 0, 1800 are seen without working then condone 1 error
	(b)		Comment	C1
			M1	(dep) $\Sigma fx \div \Sigma f$ eg "7300" \div 20
			A1	Cao

2	(a)	$160 < h \leq 170$	B1	correct class interval
	(b)	Line segments joining the points (135, 4), (145, 11), (155, 24), (165, 22) and (175, 19)	C2 [C1]	for fully correct frequency polygon for points plotted correctly at midpoints of intervals OR joining points with line segments at the correct heights and consistent within the intervals (including end values) OR correct frequency polygon with one point incorrect OR correct frequency polygon with first and last point joined NB: ignore any histogram drawn and any part of frequency polygon outside range of first and last points plotted

3	18.6	M1	for finding 4 products within intervals (including end points)	<table border="1"> <thead> <tr> <th>Min fx</th> <th>Max fx</th> </tr> </thead> <tbody> <tr> <td>5</td> <td>10</td> </tr> <tr> <td>20</td> <td>30</td> </tr> <tr> <td>105</td> <td>140</td> </tr> <tr> <td>160</td> <td>200</td> </tr> </tbody> </table> <p>Σfx must come from 4 products fx within intervals (including end points)</p>	Min fx	Max fx	5	10	20	30	105	140	160	200
		Min fx	Max fx											
		5	10											
20	30													
105	140													
160	200													
M1	for $\Sigma fx \div (1 + 2 + 7 + 8)$ or $(7.5 \times 1 + 12.5 \times 2 + 17.5 \times 7 + 22.5 \times 8) \div (1 + 2 + 7 + 8)$ or $(\text{"7.5"} + \text{"25"} + \text{"122.5"} + \text{"180"}) \div \text{"18"}$ or $\text{"335"} \div \text{"18"}$													
A1	for 18.6(111...)													