Paper: 1MA1/3F				
Question	Working	Answer	Mark	Notes
19 (a)		$160 < h \le 170$	B1	correct class interval
(b) **Q1**		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

Paper: 1MA1/2F				
Question	**Answer**	**Mark**	**Mark scheme**	**Additional guidance**
21 **Q2**	Two statements	C2	Two different statements **Acceptable** There is no 'frequency' label / *y*-axis is not labelled / no title for the *y*-axis The polygon should not be closed / have a line at the bottom / have first and last points connected (15, 6) has been plotted incorrectly / at (15, 8) / (The first point is at) 8 rather than 6 / First point is on an incorrect frequency **Not acceptable** There is no title / Points should be joined with a curve *x*-axis doesn't start at 0 There is no label The axes have not been labelled (*x* and *y*) The points haven't (all) been plotted correctly $10 < w \le 20$ and $30 < w \le 40$ have been plotted wrong The first point is plotted incorrectly, its at (15, 7) not (15, 6) The points have been joined up wrong / Points should not be joined in the shape of a triangle / They've connected all the points Done the midpoints rather than the numbers on the right side / The points are in the middle	Ignore additional statements provided no contradiction
		(C1	for one statement eg from those above)	

Paper: 1MA1/3F

Question		Answer	Mark	Mark scheme	Additional guidance
26	(a)	$40 < h \leq 50$	B1	accept 40 – 50 oe	
Q3	(b)	polygon drawn (15,7), (25,13) (35,14), (45,12) (55,16), (65,18)	B2 (B1	for fully correct polygon with points plotted at the midpoints for points plotted correctly but not joined by straight lines **or** joining points at correct heights consistently within intervals including plotting at end values **or** correct frequency polygon with one point incorrect **or** correct frequency polygon with first and last points joined directly)	Joining must be with line segments for example, at 10, 20, 30,…or at 20, 30, 40,… Ignore any histogram drawn and any part of frequency polygon outside range of first and last points plotted

Paper: 1MA1/3F

Question	Answer	Mark	Mark scheme	Additional guidance

26
 	
Q4
	40 missing from frequency scale
	
	Incorrect point (50, 5)
		C2
		
		(C1
			Two different statements
			Acceptable
			eg (50, 5) / the last point is incorrect
			    the last point should be at (45,5)
			    the last point plotted was placed incorrectly
			    for his last point he has plotted by the end of the data and for the rest he has plotted by the middle
			    he did not use the midpoint, he used 50 instead of 45
			    40 missing (from vertical axis)
			    vertical scale is not linear
			    the frequency doesn't increase in the same intervals
			    the vertical axis is not right
			Not acceptable
			eg the last point should be at (40, 5)
			    bottom of the polygon should be connected
			    he didn't start the graph at the origin
			    he did not draw a polygon
			    he has plotted the first 4 points at midpoint
			
			One acceptable statement)
				Ignore additional statements provided no contradiction