Paper: 1MA1/3H				
Question	**Working**	**Answer**	**Mark**	**Notes**
11 (a)		57	B1	cao
Q1 (b)		Decision and reason	C1	Jamil might not be correct and reason, eg the maximum weight could be less than 80 or the minimum weight could be less than 40
(c)		Shown	C1	for evidence of reading from the graph at weight 65 (= 48 to 49) or at cf 45 (= 63)
			C1	eg 25% of 60 is 15 but only 11 potatoes have a weight greater than 65g or 25% of potatoes have a weight greater than 63g

Paper: 1MA1/2H				
Question	**Working**	**Answer**	**Mark**	**Notes**
8 **Q2**		12	M1 A1	for evidence of taking a reading from the graph from $h = 160$ for answer in the range 11.8 to 12.2

Paper: 1MA1/2H				
Question	**Answer**	**Mark**	**Mark scheme**	**Additional guidance**
11 (a)	5, 35, 55, 70, 78, 80	B1	cao	
(b)	cf graph	M1	for 5 or 6 of their points plotted correctly from a cf table	Ignore to the left of the first point and right of the last point
		A1	for a fully correct graph SCB1 if 5 or 6 of their points plotted not at end but consistent within each interval and joined by a curve or line segments providing no gradient is negative	Accept a smooth curve or line segments
Q3				
(c)	7.5	M1	for a clear method to read off the cf graph at 90	Sight of 74 or 6 implies M1
		M1	for a full method to find the percentage eg (80 − "74") ÷ 80 × 100 (=7.5)	The following readings give the following percentages
		A1	for 7.5 **or** ft cf graph	72 = 10% 73 = 8.75% 74 = 7.5% 75 = 6.25% 76 = 5%

Paper: 1MA1/1H					
Question	**Answer**	**Mark**	**Mark scheme**		**Additional guidance**
12 (a)	5,15,35,55,70,80	B1	cao		
(b)	Graph drawn	M1	for 5 or 6 of their points plotted correctly from a cf table		Ignore to the left of the first point and right of the last point
		A1	for a fully correct graph SC B1 if 5 or 6 of their points plotted not at end but consistent within each interval and joined by a curve or line segments providing no gradient is negative		If histograms drawn, points must be identified Accept a smooth curve or line segments
Q4					
(c)	Correct decision and correct figures	M1	for 60 ÷ 100 × 80 (=48) oe	reading value from graph at wage = 360 (=40) **or** for $35 + \frac{1}{5} \times 20$ (=39)	ft from a cum freq graph
		M1	reading value from graph at cf = 48 (=380)	for "40" ÷ 80 × 100 (=50(%)) **or** for 60 ÷ 100 × 80 (=48)	
		C1	ft for correct decision and correct figures, eg No with 48 and "380" **or** with "40" and "50"(%) **or** with "40" and 48		

Paper: 1MA1/1H				
Question	**Answer**	**Mark**	**Mark scheme**	**Additional guidance**
12 (a)	cf graph	M1	for 5 or 6 points plotted correctly	If histograms drawn, points must be identified
		A1	for a fully correct graph SC B1 if 5 or 6 of their points plotted not at the end but consistent within each interval and joined by a curve or line segments providing no gradient is negative	Accept a smooth curve or line segments Ignore to the left of the first point and right of the last point
Q5				
(b)	13 to 14	B1	for answer in the range 13 to 14 or ft their cf graph	ft only from a cf graph

Paper: 1MA1/2H				
Question	**Answer**	**Mark**	**Mark scheme**	**Additional guidance**
8 **Q6**	Error in inequalites	C1	for identifying incorrect inequalities **Acceptable examples** gives at least one correct inequality eg ($10 < t \leq 20$) should be $0 < t \leq 20$ it should be $t \leq 20$ (all) inequalities should start with 0 should start with 0 **Not acceptable examples** $10 < t \leq 20$ is wrong the numbers have been added wrong	

Paper: 1MA1/1H				
Question	**Answer**	**Mark**	**Mark scheme**	**Additional guidance**
10 (a)	cf graph through (40, 5), (60, 25), (80, 35), (100, 38) and (120, 40)	C2	for a complete and accurate cf graph	May be a cumulative frequency curve or a cumulative frequency polygon Ignore any graph drawn to the left of the first point If histograms drawn, plots must be identified
		(C1	for at least 4 or 5 cf values plotted correctly)	
Q7			SC: B1 for 4 or 5 points plotted not at end but consistently within each interval and joined provided no gradient is negative	
(b)	answer in range 21 to 28	M1	for UQ in the range 66 to 70 or LQ in the range 42 to 46 or ft their cf graph	
		A1	for answer in range 21 to 28 or ft their cf graph	
(c)	answer in the range $\frac{19}{40}$ to $\frac{24}{40}$	M1	for finding the difference between readings taken from the cf axis at points from a mark of 50 and a mark of 90 or ft their graph (if possible)	Their graph must be a cf graph
		A1	for an answer in the range $\frac{19}{40}$ to $\frac{24}{40}$ or ft their cf graph	Accept any equivalent fraction, decimal from 0.475 to 0.6 or percentage from 47.5% – 60%

Paper: 1MA1/2H				
Question	**Answer**	**Mark**	**Mark scheme**	**Additional guidance**
11 **Q8**	Box plot	B3 (B2 (B1	for fully correct box plot for box plot showing a box and at least 3 correctly plotted values from 24, 42, 54, 64, 96) for correctly identifying one of the LQ (42) Median (54) or UQ (64) from the CF graph)	Box can be of any height. Accept ends that are marked (eg line, cross, dot) or defined by the end of the whiskers if clear May be implied by one of these correct on the box plot

Paper: 1MA1/3H				
Question	**Answer**	**Mark**	**Mark scheme**	**Additional guidance**
13 **Q9**	Statements	C1 C1	Makes reference to the fact that the label on the horizontal axis is missing Makes reference to the fact that the graph has not been plotted at the top end of the class intervals, eg has plotted at midpoints	

Paper: 1MA1/1H				
Question	**Answer**	**Mark**	**Mark scheme**	**Additional guidance**
10 (a)	10, 25, 50, 80, 85,100	B1	cao	
(b)	Graph drawn	M1	for 5 or 6 of their points plotted correctly from a cf table with no more than one error	If histograms drawn, plots must be identified.
		A1	for a fully correct graph SC B1 for 5 or 6 cf values plotted at correct heights not at end but consistently within each interval and joined provided no gradient is negative	Accept a smooth curve or line segments. Ignore to the left of the first point and right of the last point.
Q10				
(c)	35 to 39	B1	for answer in the range 35 to 39 **or** ft their graph (if possible)	
(d)	85 to 93	M1	for finding the difference between readings taken from the profit axis at points from a cf of 25 and a cf of 75 ft their graph (if possible)	
		A1	for answer in the range 85 to 93 **or** ft their graph (if possible)	If answer is in the range award the marks unless from obvious incorrect working