Paper: 1MA1/2H					
Question		**Answer**	**Mark**	**Mark scheme**	**Additional guidance**
5	(a)	0, –4, –6, –4, 0	B2 (B1	fully correct figures at least 2 correct figures)	
	(b)	Graph	M1 A1	(dep B1) for at least 5 points correctly plotted ft from (a) fully correct graph	Must be a curve
	(c)	2.6 and –1.6	M1	for $y = -2$ drawn **or** intersections with $y = -2$ **or** $y = x^2 - x - 4$ drawn **or** 1 correct value	If answers stated as coordinates, award M1 for both coordinates and M0 for one coordinate
			A1	ft a quadratic graph **or** for answers in the range 2.5 to 2.7 **and** −1.5 to −1.7	

Q1

Paper: 1MA1/2H				
Question	**Answer**	**Mark**	**Mark scheme**	**Additional guidance**
2	Graph	B3	for a correct line between $x = -2$ and $x = 4$	
Q2		(B2	for a correct straight line segment through at least 3 of $(-2, -7), (-1, -5), (0, -3), (1, -1), (2, 1), (3, 3), (4, 5)$ **or** for all of these points plotted but not joined **OR** for a line drawn with a positive gradient through $(0, -3)$ **and** clear intention to use a gradient of 2, eg line through $(0, -3)$ going across 2 squares and up 4 squares)	Ignore any incorrect points. Points need not be plotted for a correct line (segment) drawn Table of values <table><tr><td>x</td><td>−2</td><td>−1</td><td>0</td><td>1</td><td>2</td><td>3</td><td>4</td></tr><tr><td>y</td><td>−7</td><td>−5</td><td>−3</td><td>−1</td><td>1</td><td>3</td><td>5</td></tr></table>
		(B1	for at least 2 correct points stated or plotted **OR** for a line drawn with a positive gradient through $(0, -3)$ **OR** a line with gradient 2)	Ignore any incorrect points Coordinates may be in a table or in working

Paper: 1MA1/2H				
Question	**Answer**	**Mark**	**Mark scheme**	**Additional guidance**
4 (a)	13, (6), 5, 4, –3	B2	for all 4 values correct	
		(B1	for 2 or 3 correct values)	
(b)	Correct graph	M1	ft (dep on B1) for plotting at least 4 of the points from their table correctly	
Q3		A1	for a fully correct curve drawn	Accept a freehand curve drawn that is not made of line segments Line sections outside the required range can be ignored.

Paper: 1MA1/2H

Question	Answer	Mark	Mark scheme	Additional guidance
4 (a)	(10), 5, (2), 1, 2, (5), 10	B2	for all 4 values correct	
		(B1	for 2 or 3 correct values)	
(b)	Graph	M1	ft (dep on B1) for plotting at least 5 of their points correctly	
Q4		A1	for a fully correct curve drawn	Accept a freehand curve drawn that is not made of line segments
(c)	−0.65 to −0.8 and 2.65 to 2.8	M1	for $y = 4$ drawn **or** intersection with $y = 4$ **or** $y = x^2 – 2x – 2$ drawn **or** 1 correct value ft a quadratic graph	If answers stated as coordinates, award M1 for both coordinates and M0 for one coordinate
		A1	ft a quadratic graph **or** for answers in the range 2.65 to 2.8 **and** −0.65 to −0.8	

Paper: 1MA1/3H				
Question	**Answer**	**Mark**	**Mark scheme**	**Additional guidance**
3 (a)	2, −4, 2, 8	B2	all 4 values correct	
		(B1	for 2 or 3 correct values)	
(b) **Q5**	Graph	M1	(dep B1) for at least 5 points plotted correctly ft from part a	
		A1	for a fully correct curve drawn	Accept freehand curves drawn that are not line segments; there must be some attempt to draw the minimum point below $y = -4$
(c)	−2.6 or 1.6	B1	for 1 correct value, ft a non linear graph	Award for −2.6 or 1.6 or both values but do not award the mark if a correct value is given with an incorrect value. Accept 1.56 or −2.56 Note for ft to be applied if the graph may be joined by line segments

Paper: 1MA1/1H

Question	Answer	Mark	Mark scheme	Additional guidance
9 (a)	(9), –4, –5, 0, 5, (4), (–9)	B2	for all 4 values correct	
		(B1	for 2 or 3 correct values)	
(b) **Q6**	Graph drawn	B2	for a fully correct graph	Accept a freehand curve drawn that is not made of line segments Ignore anything outside the required range
		(B1	ft (dep on B1 in (a)) for plotting at least 5 of the points from their table correctly)	

Paper: 1MA1/1H				
Question	**Answer**	**Mark**	**Mark scheme**	**Additional guidance**
6 (a)	5,(1),(-1),-1,1,5	B2	for all 4 values correct	
		(B1	for 2 or 3 correct values)	
(b)	Graph drawn	B2	for a fully correct graph	Accept a freehand curve drawn that is not made of line segments
Q7		(B1	ft (dep on B1 in (a)) for plotting at least 5 of the points from their table correctly)	Ignore anything drawn outside the required range
(c)	0.3 to 0.5 and 2.5 to 2.7	M1	for a correct method, eg marking intercepts with *x*-axis **or** one correct solution **or** both solutions given as a coordinates, eg (0.4, 2.6) or (0.4, 0) **and** (2.6, 0)	ft their graph for this mark Accept these coordinates reversed
		A1	for answers in the range 0.3 to 0.5 and 2.5 to 2.7 **or** ft their graph with at least 2 solutions	