

### Marking Guidelines

Question	1 mark	2 marks	3 marks	Mark
1(a)	One correct graph with correct points of intersection	Two correct graphs with incorrect/no points of intersection	Correct response provided	/3
1(b)	One correct step only	Correct quadratic inequality with incorrect/no solution	Correct response provided	/3
2(a)	Correct response provided			/1
2(b)	Hyperbola correctly graphed only	Two graphs correctly drawn with incorrect/no solution	Correct response provided	/3
2(c)	One error in working	Correct response provided		/2
3	One correct case only	Two correct cases, or Three correct case with incorrect/no solution	Correct response provided	/3
<b>Inequalities Mark</b>				<b>/15</b>
4(a)	Two or three sections of the graph drawn only	Correct response provided		/2
4(b)(i)	Correct graph with one important feature incorrect/missing	Correct response provided		/2
4(b)(ii)	Correct graph with one important feature incorrect/missing	Correct response provided		/2
4(c)(i)	Correct graph with one important feature incorrect/missing	Correct response provided		/2
4(c)(ii)	Correct graph with one important feature incorrect/missing	Correct response provided		/2
5(a)	Correct graph with one important feature incorrect/missing	Correct response provided		/2
5(b)	Graph basically correct with no more than two features incorrect/missing	One important feature incorrect/missing	Correct response provided	/3
5(c)	Graph basically correct with no more than two features incorrect/missing	One important feature incorrect/missing	Correct response provided	/3
<b>Graphing Techniques Mark</b>				<b>/18</b>

6(a)	One error completing the square	Correct response provided		/2
6(b)	Correct range or domain	Correct response provided		/2
6(c)	Correct response provided			/1
6(d)	One error in working	Correct response provided		/2
6(e)	Correct range or domain	Correct response provided		/2
6(f)	Graph of $f(x)$ or $f^{-1}(x)$ correct only	Two correct graphs with labels	Correct response provided	/3
Inverse Functions Mark				/12
7(a)	One incorrect feature	Correct response provided		/2
7(b)	One incorrect feature	Correct response provided		/2
7(c)	Clear explanation using appropriate mathematical terms			/1
Simple Pendulum Mark				/5
Total				/50