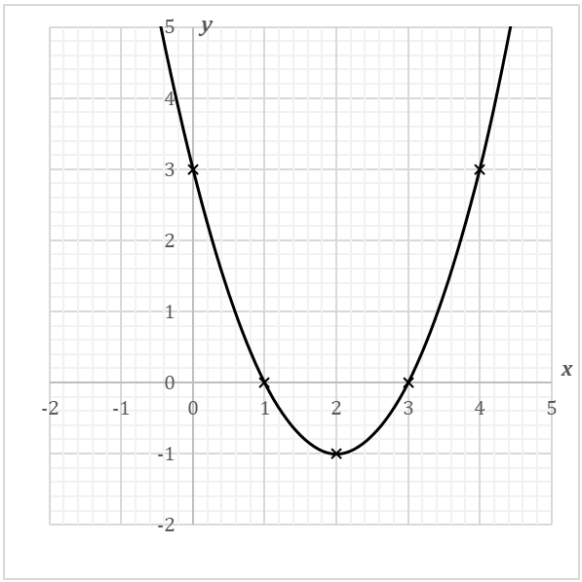
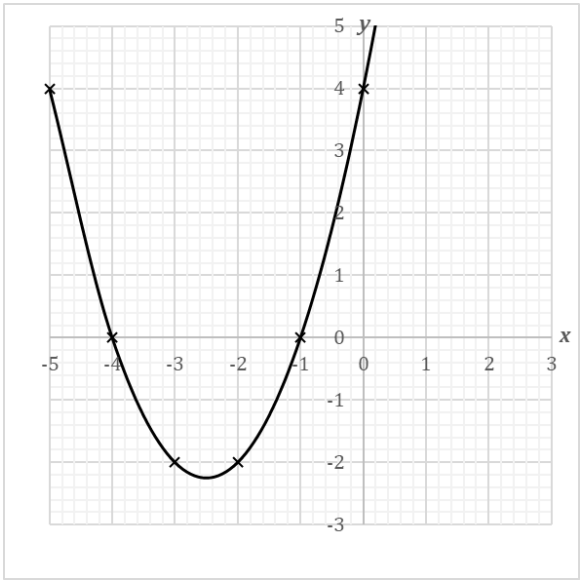
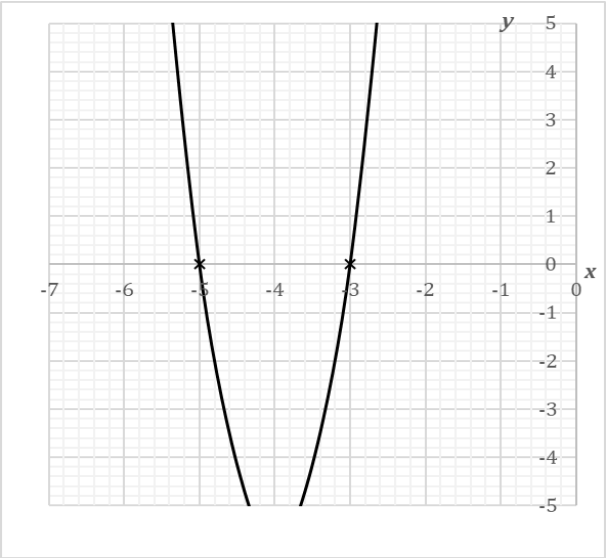
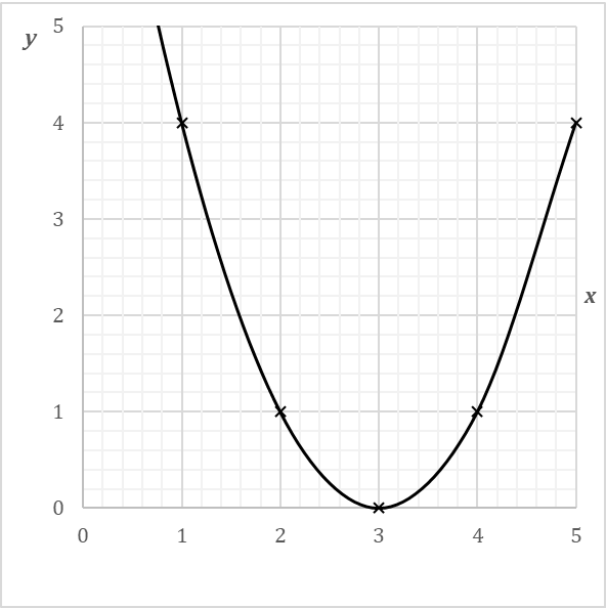
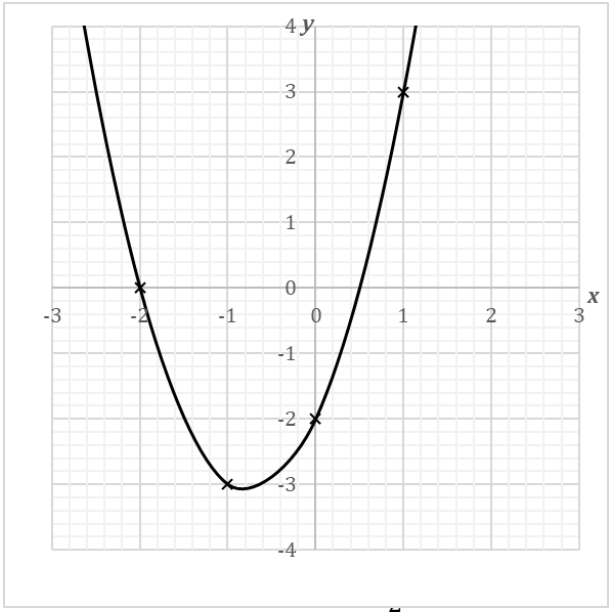
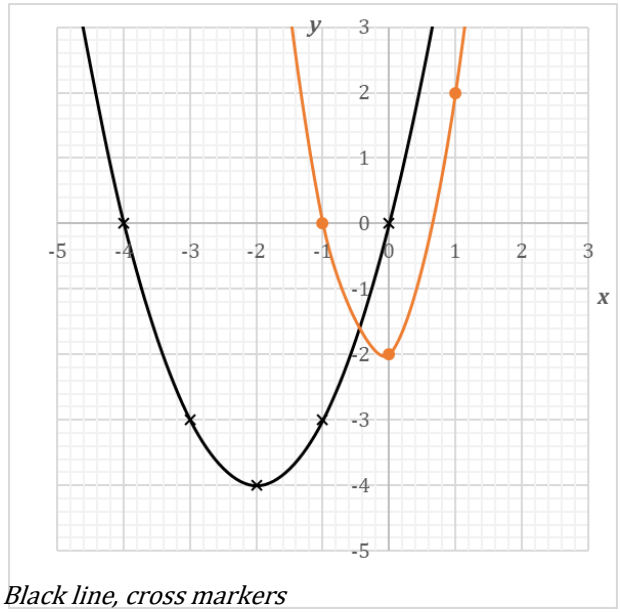
	Solutions: **Quadratic Inequality**	
1(a)	$(x-3)(x-1)$	[2] – Correct factorisation
1(b)	 $\therefore x^2 - 4x + 3 < 0, when\ x > 1\ and\ x < 3$	[1] Greater than 1 [1] Less than 3
2(a)	$(m+4)(m+1)$	[2]
2(b)	 $\therefore m^2 + 5m + 4 > 0, when\ m < -4\ and\ m > -1$	[1] Less than -4 [1] Greater than -1

3(a)	$6x^2 + 48x + 90 = x^2 + 8x + 15$	[1] – Simplifying by division of 6
	$(x + 5)(x + 3)$	[2] – Correct factorisation
3(b)	 $\therefore 6x^2 + 48x + 90 \geq 0, when\ x \geq -3\ and\ x \leq -5$	[1] Greater than or equal to -3 [1] Less than or equal to -5
4	$x^2 - 6x + 9 > 0 = (x - 3)(x - 3) > 0$	[2] – Correct factorisation
	 $x > 3\ and\ x < 3$	[1] Greater than 3 [1] Less than 3

5	$(2k-1)(x+2)$	[2] – Correct factorisation
		[2] – Greater than ½ [1] – Less than -2
6	$(\mathbf{1})\ x^2+4x>0$; *and* $(\mathbf{2})(x+1)(3x-2)>0$	
	 *(1) – Black line, cross markers* *(2) - Orange line, circle markers*	[1] – Line 1, *x* intercept at 0 [1] – Line 1, *x* intercept at -4 [1] – Line 2, *x* intercept at -1 [1] – Line 2, *x* intercept at 2/3
	$\therefore x^2+4x>0, whe\ x<-4\ and\ x>0$ $\therefore (x+1)(3x-2)>0, when\ x<-1\ and\ x>\frac{2}{3}$ *The values of x that satisfy both inequalities are:* $x<-4$ $x>\frac{2}{3}$	[1] – For less than -4 [1] – For greater than 2/3

END