

Solving Inequalities Mark Scheme		
1(a)	$x < 7$	[1]
1(b)	$x > 4$	[1]
1(c)	$x \leq 2$	[1]
1(d)	$x \geq 6$	[1]
1(e)	$x \leq 4$	[1]
2(a)	$x < 5$	[1]
2(b)	$x > 1$	[1]
2(c)	$x \leq 10$	[1]
2(d)	$x \geq 5$	[1]
2(e)	$x \leq 9$	[1]
3(a)	$x > 9$	[1]
3(b)	$x > 10$	[1]
3(c)	$x \leq 0$	[1]
3(d)	$x \geq 0$	[1]
4(a)	$16x - 12 > 2x + 16$	[1] – Rearrangement
	$14x > 28$	[1] – Simplifying
	$x > 2$	[1] – Final answer
4(b)	$8x - 12 > 2x + 10$	[1] – Rearrangement
	$6x > 22$	[1] – Simplifying
	$x > 11/3$	[1] – Final answer
4(c)	$9 - 3x > 2x + 6$	[1] – Rearrangement
	$3 > 5x$	[1] – Simplifying
	$x < 3/5$	[1] – Final answer
5(a)	$-3 < 5x - 5 < 15$	[1] – Rearrangement
	$2 < 5x < 20$	[1] – Simplifying
	$2/5 < x < 4$	[1] – Final answer
5(b)	$10 < 3x - 5 < 18$	[1] – Rearrangement
	$5 < 3x < 23$	[1] – Simplifying
	$5 < x < 23/3$	[1] – Final answer

Turn over ►

<b>5(c)</b>	$-4 < 7 - 3x < 5$	[1] – Rearrangement
	$-11 < -3x < -2$	[1] – Simplifying
	$\frac{11}{3} > x > \frac{2}{3}$	[1] – Final answer, accept $\frac{2}{3} < x < \frac{11}{3}$

END