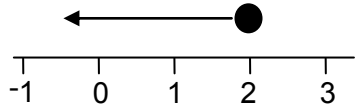
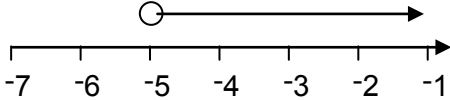


Question			Answer	Marks	Part Marks and Guidance	
1	(a)	(i)	$5 \leq x < 10$	3	Or B2 for $5 \leq x$ or $x < 10$ Or B1 for $5 < x$ or $x \leq 10$	If inequalities written separately condone if the word 'and' written in between but 'or', 'and' or nothing loses 1 mark
		(ii)	5, 6, 7, 8, 9	2	Or B1 for 5, 6, 7, 8, 9, 10	
	(b)		$x < -4$	2	Or B1 for $x > -4$ or $x = -4$	

2	(a)		$x > 1.5$ oe isw	2	<b>M1</b> for $7x - 3x > 6$ or better Or <b>SC1</b> for 1.5 oe seen nfw	
	(b)		 <p>A number line with tick marks at -1, 0, 1, 2, and 3. A solid black dot is placed at the tick mark for 2. A horizontal arrow points to the left from the dot, extending past the tick mark for 0.</p>	2	1 for hollow circle, dot or line/arrow too short	Line/arrow extending past 0 for 2 Condone a line rather than an arrow

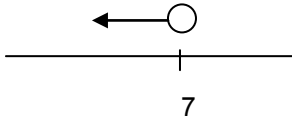
3	(a)	(i)	$m > -5$	2	<b>M1</b> for correct first step eg $2m > -4 - 6$ or better, dividing through by 2 or for $(m =, m <, <) -5$	Condone $x, n$ etc used instead of $m$
		(ii)		1FT	Condone solid circle  Correct or FT from <i>their</i> attempt at an inequality only	Allow any reasonable representation
	(b)		3	1		

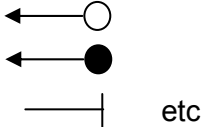
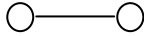
4	(a)	$x < 4$	2	<b>B1</b> for $x = 4$ or <b>M1</b> for $5x < 18 + 2$ or better	Condone $\leq$ for 1 or 2 marks
	(b)	$p = 5, q = 17$			

5	(a)	$x \leq 4$ oe	2	<b>M1</b> for $3x < 10 + 2$ (or better) Or <b>B1</b> for 4 oe seen	
	(b)	Correct representation	1		

6	(a)	Shading above given line	1		For each part shading should extend along length of line but may be of minimal width
	(b)	Dotted line $x + y = 5$ drawn Shading above <i>their</i> $x + y = 5$	1 1	At least from (1, 4) to (5, 0)	Condone solid line
	(c)	$x = 1, y = 3$	3	<b>B1</b> for dotted $y = 2$ drawn And <b>B1FT</b> for shading below <i>their</i> $y = 2$	Condone solid line FT <i>their</i> horizontal line

7	(a)	$y > 12$ final answer	2	<b>M1</b> for $3y > 25 + 11$ or $y > \frac{\text{their}(25+11)}{3}$ or better Or <b>SC1</b> for $y = 12, y < 12, y \leq 12, y \geq 12$ or 12	
	(b)	4, 5, 6	2	<b>M1</b> for $(3 \text{ to } 4) < w < (6 \text{ to } 7)$ or for $[3w = ] 12, 15, 18$ or for two of the three given (and no incorrect values) or for 4, 5, 6 and one incorrect value	

8	(a)	$m < 7$ final answer	2	<b>M1</b> for $5m < 43 - 8$ or better or $(m =) 7$	<p>Condone other variable eg <math>x &lt; 7</math>          Condone embedded answer for <b>M1</b>          If solved as an equation but 1 error made allow <b>M1</b> if answer given as "correct" inequality          eg <math>5m = 43 - 8</math>  <math>5m = 30</math>  <math>m = 6</math>  <math>m &lt; 6</math></p>
	(b)		1FT	FT <i>their</i> solution provided between 2 and 12	<p>Condone a solid circle or other clear indication          Only FT from an inequality          Ignore left hand end of arrow unless a circle</p>

9	(a)	$x < 60$ isw	2	<b>B1</b> for $\frac{x}{4} < 15$ or $x - 20 < 40$ or for a correct 2 <sup>nd</sup> step leading to $x <$ or $x >$ following an incorrect 1 <sup>st</sup> step  Or <b>SC1</b> for $x = 60$	eg $\frac{x}{4} - 5 < 1$ $x - 5 < 40$ $x < 45$
	(b)	Any reasonable representation	1FT	Correct or FT <i>their</i> (a); mark intention	eg  etc Arrow/line any length  but not  However ignore any symbol at -20

10	(a)	$7x + 2 < 5x + 25$ oe	1	Or better	Condone $\leq$ in both parts Condone other letters used instead of x in both parts Condone $7x + 2b < 5x + 25b$
	(b)	$7x - 5x + b < a$ or $bx < 25 - 2 + ax$ or $7x - 5x = 25 - 2$ or $7x - 5x > 25 - 2$  $2x < 23$ or $x = 11.5$ or $x > 11.5$  $x < 11.5$  11	<b>M1</b>  <b>M1</b>  <b>A1FT</b>  <b>A1FT</b>	For correctly collecting <i>their</i> x terms or <i>their</i> constants as an inequality or both as an equation  For correctly collecting <i>their</i> x terms and <i>their</i> constants as an inequality or correctly solving their inequality but answering as an equation  For correctly solving their inequality  And, following at least <b>M1</b> , allow <b>A1FT</b> for rounding <i>down</i> their non-integer solution (or rounding <i>up</i> if appropriate from <i>their</i> inequality).  Allow <b>SC3</b> for answer 11	Follow through any linear inequality with two terms on each side.  The first M1 may be implied.  Allow marks retrospectively if solution attempted in (a) provided it's not contradicted in (b)  No FT for t & i approach

11		$n > -5$ or $-5 < n$	3	<p><b>M2</b> for <math>5n - 2n &gt; -13 - 2</math> or better</p> <p>Or <b>M1</b> for <math>5n - 2n</math> or <math>-13 - 2</math> or better in an inequality, or <math>13 + 2 &gt; 2n - 5n</math></p> <p>If <b>0</b>, then <b>SC1</b> for <math>(n =) -5</math> nfw</p>	<p>If <math>13 + 2 &gt; 2n - 5n</math> allow <b>M2</b> only if inequality sign correct after division. Otherwise allow <b>M1</b></p> <p>If solved as an equation <b>M1</b> or <b>M2</b> can be implied if correct inequality symbol used in answer</p> <p>Condone <math>x</math> used rather than <math>n</math></p>
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12		$x \leq 6$	2	<b>M</b> for $7x \leq 47 - 5$ or better, or 6 seen	<p>Condone use of <math>&lt;</math></p> <p>condone use of equal sign for M1</p> <p>Ignore wrong simplification after correct first step</p>
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