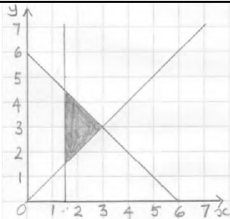
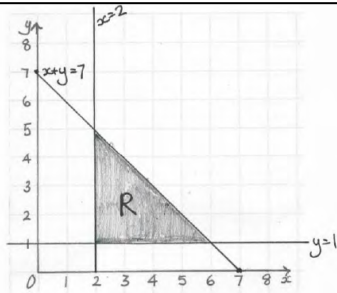


1	See appendix 1		3	M1	for $y = x$ correctly drawn
				M1	for $x = 4$ and $y = -2$ correctly drawn
		Correct region identified		A1	for correct region identified region may be shaded or left unshaded Condone missing label if region is clear and no contradictory labels
Total 3 marks					

2	(a)		-1, 0, 1, 2, 3, 4	2	B2	B1 for - 2, -1, 0, 1, 2, 3, 4 or -1, 0, 1, 2, 3
	(b)		$y \leq 6$ $x + y \geq 5$ $y \geq x - 3$	2		B2 for 3 correct inequalities B1 for 2 correct inequalities (In both cases allow < in place of \leq , and > in place of \geq)
						Total 4 marks

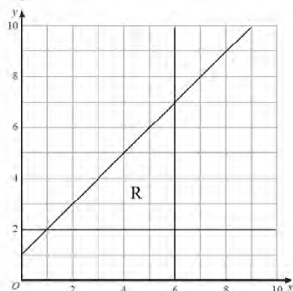
3		$y \geq 1$ oe $x \leq 3$ oe $y \leq 3x - 2$	3	B1 B1 B1	Condone < and > in place of \leq and \geq throughout. SC B1 if no marks awarded, recognition of lines $x = 3$ and $y = 1$. Allow incorrect inequality and condone use of equals signs eg $y < 1$, $x = 3$ may be seen on diagram.
Total 3 marks					

4	(a)(i)		Correct line	1	B1	For $x = 1.5$ drawn
	(ii)		Correct line	1	B1	For $y = x$ drawn
	(iii)		Correct line	1	B1	For $x + y = 6$ drawn
	(b)		Correct region	1	B1	dep on B3 for correctly shading the region R accept unlabelled or unshaded if clear. Shading can be 'in' or 'out'.
Total 4 marks						

5	(a)(i)			3	B1	$y = 1$ drawn
	(ii)		B1	$x = 2$ drawn		
	(iii)		B1	$x + y = 7$ drawn		Allow dashed lines or solid lines for graphs condone lack of labels if unambiguous
		Line length 2cm + but shaded area must be enclosed for the mark in (b)				
	(b)			1	B1	correct region shaded – shaded in or out – labelled R or clear intention to be the required region (ft only for one vertical line, one horizontal line and one line with a negative gradient)
Total 4 marks						

Line length 2cm + but shaded area must be enclosed for the mark in (b)

6	(b)	Lines (solid or dashed) $x = 6$ and $y = 2$ drawn		3	B1 The lines $x = 6$ and $y = 2$ should extend far enough to intersect with each other.
		Line (solid or dashed) $y = x + 1$ drawn			B1 The line should extend from at least $x = 1$ to $x = 6$ or far enough to intersect with their horizontal and vertical lines.
		Region R shown (shaded or not shaded)	Correct region identified		B1 dep on B2



7	(b)		$y \geq 2$ $x \leq 6$ $y \leq x$	3	B3 for all 3 correct Allow $2 \leq y, 6 \geq x$ and $x \geq y$ B2 for 2 correct B1 for 1 correct Allow $<$ and $>$ signs SCB2: $y \leq 2, y \geq x$ and $x \geq 6$ (for all 3) Allow $<$ and $>$ signs
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8			$x \leq 1$	4	B1 accept $x < 1$
			$y \geq -2$		B1 accept $y > -2$
	$y = 2x + c$ or $y = mx + 4$				M1 allow $=$ or $<$ or \leq or $>$ or \geq
	Correct answer scores full marks (unless from obvious incorrect working)	$y \leq 2x + 4$			A1 oe, allow $y < 2x + 4$ oe
					SCB2 for the correct inequalities with all inequality signs the wrong way round
					Total 4 marks