1 (b) Solve the inequality 3x + 15 < 8x + 3Show clear algebraic working.

(3)

(Total for Question 1 is 3 marks)

2 (c) Solve the inequality 4x + 7 > 2

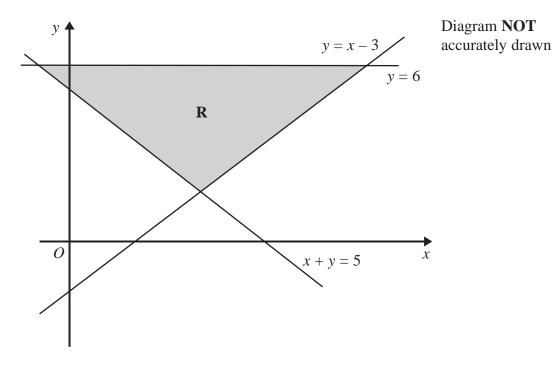
(2)

(Total for Question 2 is 2 marks)

3 (a) Write down the integer values of x that satisfy the inequality  $-2 < x \le 4$ 

(2)

The region  $\mathbf{R}$ , shown shaded in the diagram, is bounded by three straight lines.



(b) Write down the three inequalities that define the region  ${\bf R}$ .

.....

(2)

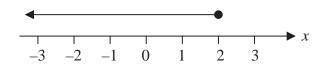
(Total for Question 3 is 4 marks)

4 (	(a)	Solve th	ne inea	uality	2 r	+7>	< A
4 (	(a)	Solve u	ie meg	uanty	$\angle X$	+ / /	> 4

(2)

(Total for Question 4 is 2 marks)

**5** (a)



Write down the inequality shown on the number line.

(1)

$$-4 \leqslant 2y < 6$$

y is an integer.

(b) Write down all the possible values of y.

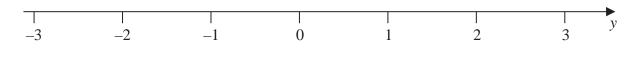
(2)

(c) Solve the inequality  $7t - 3 \le 2t + 31$ Show your working clearly.

(2)

(Total for Question 5 is 5 marks)

6 (a) On the number line, show the inequality  $-2 \leqslant y < 1$ 



(2)

n is an integer.

(b) Write down all the values of n that satisfy  $-3.4 < n \leqslant 2$ 

(2)

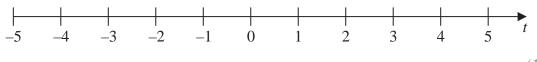
(4)

(Total for Question 6 is 4 marks)

7 (c) (i) Solve the inequality 7t - 8 < 2t + 7

(2)

(ii) On the number line below, represent the solution set of the inequality solved in part (c)(i)



(1)

(Total for Question 7 is 3 marks)

8 Solve the inequality  $3-4x \le 11$ 

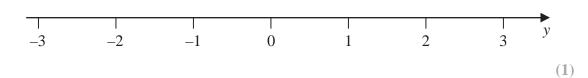
(Total for Question 8 is 2 marks)

9 n is an integer.

(a) Write down all the values of n such that  $-2 \le n < 3$ 

(2)

(b) On the number line, represent the inequality  $y\leqslant 1$ 



(Total for Question 9 is 3 marks)

10 (a) Solve 4y + 5 > 12

(2)

(Total for Question 10 is 2 marks)

11 (a) Solve the inequality  $5x - 7 \le 2$ 

(2)

(Total for Question 11 is 2 marks)

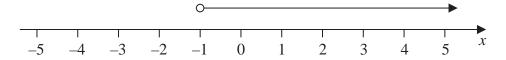
$$-8 < 2y \leqslant 2$$

y is an integer.

(a) Find all the possible values of y

(2)

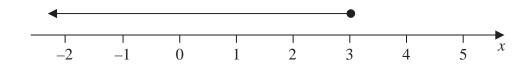
(b) Write down the inequality shown on the number line.



(1)

(Total for Question 12 is 3 marks)

13 (b) Write down the inequality shown on the number line



(1)

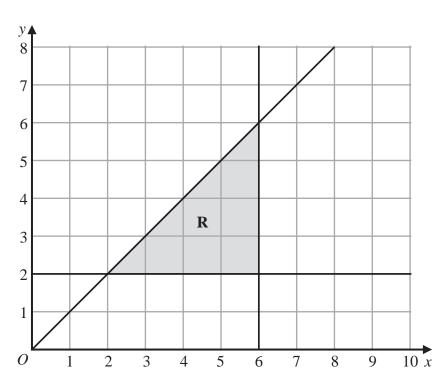
(c) Solve the inequality 7w + 6 > 12w + 14

(3)

(Total for Question 13 is 4 marks)

**14** (a) Solve 9 - 4x > 17

(2)



(b) Write down the three inequalities that represent the shaded region  ${\bf R}$ 

(3)

(Total for Question 14 is 5 marks)