Inequalities

Question Paper

Level	GCSE
Subject	Maths
Exam Board	Edexcel GCSE
Topic	Inequalities
Grade Level	Grade 4
Booklet	Question Paper

Time Allowed: **69 minutes**

Score: **/57**

Percentage: **/100**

Grade Boundaries:

1. $-1 \leq n < 4$

n is an integer.

Write down all the possible values of n.

.....

(2 marks)

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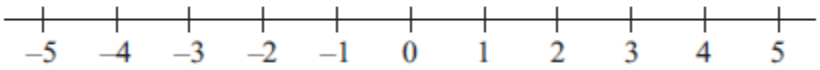
2. (a) $x > -3$

Show this inequality on the number line.



(2)

(b) Solve the inequality $7y - 34 \leq 8$

.....

(2)

(c) Write down the integer values of x that satisfy the inequality

$$-2 \leq x < 3$$

.....

(2)

(6 marks)

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3. $-2 \leq n < 5$

n is an integer.

(a) Write down all the possible values of n.

.....

(2)

(b) Solve the inequality $4x + 1 > 11$

.....

(2)

(4 marks)

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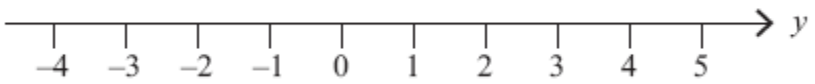
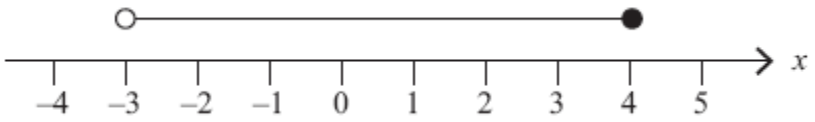
4. (a) On the number line below, show the inequality $-2 < y < 3$



(1)

(b) Here is an inequality, in x, shown on a number line.



Write down the inequality.

.....

(2)

(c) Solve the inequality $4t - 5 > 11$

.....

(2)

(5 marks)

5. (a) n is an integer.

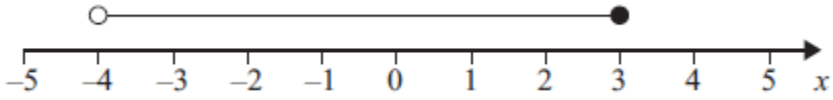
$-1 \leq n < 4$

List the possible values of n.

.....

(2)

(b)



Write down the inequality shown in the diagram.

.....

(2)

(c) Solve $3y - 2 > 13$

.....

(2)

(6 marks)

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6. $-3 < n \leq 1$

n is an integer.

(a) Write down all the possible values of n.

.....

(2)

(b) Solve the inequality $3p - 7 > 11$

.....

(2)

(4 marks)

7. n is an integer.

$-3 < n < 4$

(a) Write down all the possible values of n.

.....

(2)

(b) Solve $2x - 7 \leq 11$

.....

(2)

(4 marks)

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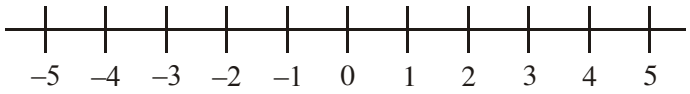
8. (a) (i) Solve the inequality

$$5x - 7 < 28$$

.....

(ii) On the number line, represent the solution set to part (i).



(3)

n is an integer such that $-4 \leq 2n < 3$.

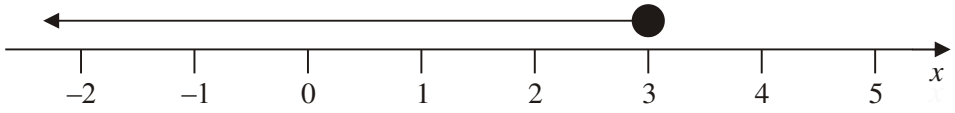
(b) Write down the possible values of n.

.....

(3)

(6 marks)

9. (i) Write down the inequality shown on the number line.



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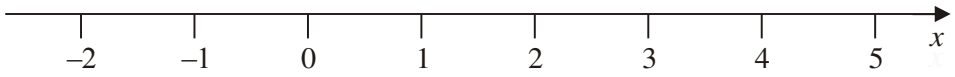
(ii) Show the inequality $x > 1$ on the number line below.



(3 marks)

10. (i) Solve the inequality $7x - 3 > 18$

.....

x is a whole number such that $7x - 3 > 18$

(ii) Write down the smallest value of x.

.....

(4 marks)

11. (a) Solve $5x + 12 < 17$

(2)

$x =$ .....

(b) Solve the inequality $3(2y + 1) > 10$

(2)

.....

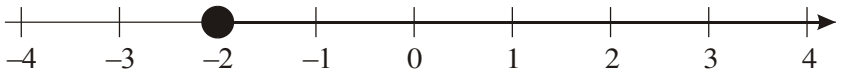
(4 marks)

12. (a) Solve the inequality $4x - 3 < 7$

.....

(2)

An inequality is shown on the number line.



(b) Write down the inequality.

.....

(2)

(c) n is a whole number such that

$$6 \leq 3n < 15$$

List all the possible values of n.

.....(2)

(6 marks)

13. m is an integer such that $-2 < m \leq 3$

(a) Write down all the possible values of m.

.....

(2)

(b) Solve $7x - 9 < 12$

.....

(2)

(4 marks)