

Solving Inequalities

Question Paper

Course	Edexcel IGCSE Maths
Section	2. Equations, Formulae & Identities
Topic	Solving Inequalities
Difficulty	Easy

Time allowed: 60
Score: /43
Percentage: /100

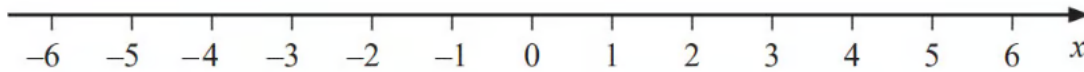
Question 1a

Solve $14n > 11n + 6$

[2 marks]

Question 1b

On the number line below, show the set of values of x for which $-2 < x + 3 \leq 4$



[3 marks]

Question 2a

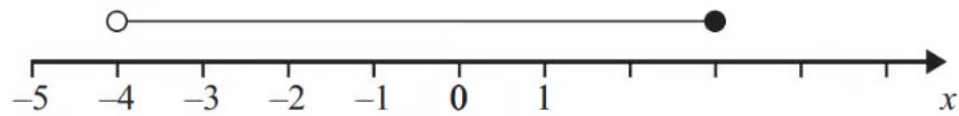
n is an integer.

$$-1 \leq n < 4$$

List the possible values of n .

[2 marks]

Question 2b



Write down the inequality shown in the diagram.

[2 marks]

Question 2c

Solve $y - 2 > 5$

[1 mark]

Question 3a

$$-3 < n \leq 1$$

n is an integer.

Write down all the possible values of n .

[2 marks]

Question 3b

Solve the inequality $3p - 7 > 11$

[2 marks]

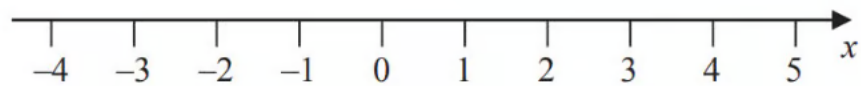
Question 4

Solve $3x - 5 < 16$

[2 marks]

Question 5a

Show the inequality $x < 3$ on the number line below



[2 marks]

Question 5b

Solve the inequality $4x - 7 \geq 13$

[2 marks]

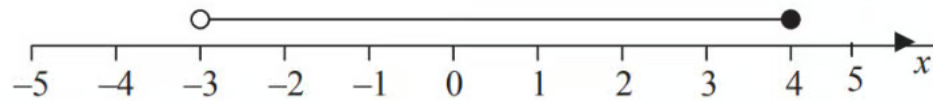
Question 6a

Solve the inequality $6y + 5 > 8$

[2 marks]

Question 6b

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



Write down the inequality.

[2 marks]

Question 7

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

y is an integer.

Write down all the possible values of y .

[2 marks]

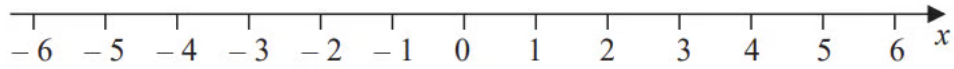
Question 8a

Solve the inequalities $-7 \leq 2x - 3 < 5$

[3 marks]

Question 8b

On the number line, represent the solution set to part a).



[1 mark]

Question 9

Solve the inequality $5x - 7 \leq 2$

[2 marks]

Question 10a

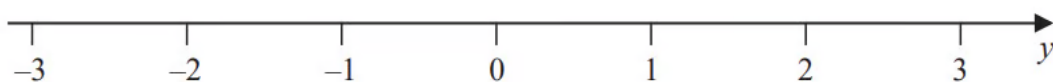
n is an integer.

Write down all the values of n such that $-2 \leq n < 3$

[2 marks]

Question 10b

On the number line, represent the inequality $y \leq 1$



[1 mark]

Question 11

Solve $5(x + 3) < 60$

[2 marks]

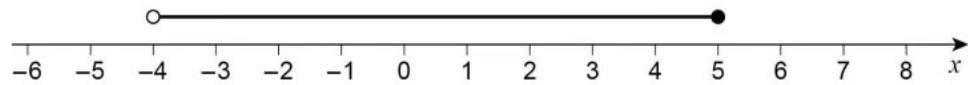
Question 12

Solve $-3x > 6$

[1 mark]

Question 13

Circle the inequality shown by the diagram.



$-4 \leq x < 5$

$-4 \leq x \leq 5$

$-4 < x < 5$

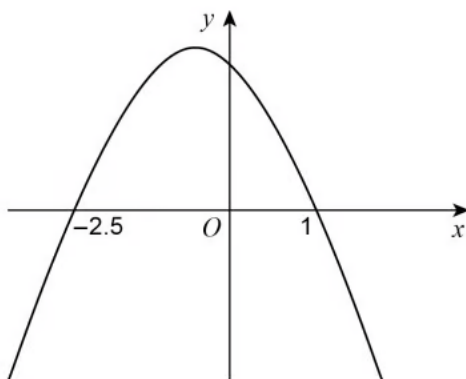
$-4 < x \leq 5$

[1 mark]

Question 14

Here is a sketch of $y = f(x)$ where $f(x)$ is a quadratic function.

The graph intersects the x -axis where $x = -2.5$ and $x = 1$



Circle the solution of $f(x) > 0$

$$x < -2.5 \text{ or } x > 1$$

$$-2.5 < x < 1$$

$$x > -2.5 \text{ or } x > 1$$

$$x > -2.5 \text{ or } x < 1$$

[1 mark]

Question 15

Solve the inequality.

$$3x - 2 > 10$$

[2 marks]

Question 16

Write down the largest integer that satisfies $5x - 1 < 10$.

[1 mark]