

GCSE OCR Math J560

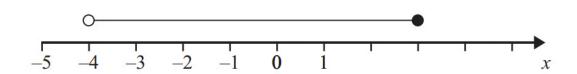
Inequalities

Question Paper

"We will help you to achieve A Star"



(b)



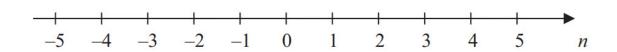
Write down the inequality shown in the diagram.

[2 marks]

Question 2

$$-2 < n \le 3$$

(a) Represent this inequality on the number line.



[2 marks]

Question 3

$$-3 < n \le 1$$

n is an integer.

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

[2 marks]



$$-5 < y \leqslant 0$$

y is an integer.

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

[2 marks]

Question 5

Solve
$$3x - 5 < 16$$

[2 marks]

Question 6

(b) Solve the inequality $4x - 7 \ge 13$

[2 marks]

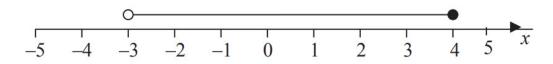
Question 7

(b) Solve
$$7x - 9 < 3x + 4$$

[2 marks]



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



Write down the inequality.

[2 marks]

Question 9

n is an integer with $-5 < 2n \le 6$

Write down all the values of n

[2 marks]

Question 10

m is an integer such that $-2 < m \le 3$

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

[2 marks]

Question 11

(a) Solve the inequality 6y + 5 > 8

[2 marks]

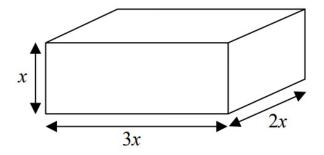


Solve 6x + 4 > x + 17

[2 marks]

Question 13

Here is a cuboid.



All measurements are in centimetres.

x is an integer.

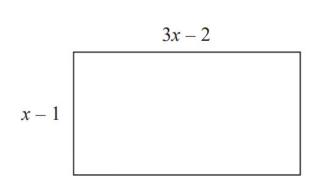
The total volume of the cuboid is less than 900 cm³

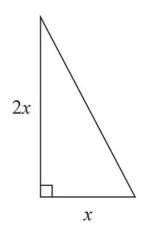
Show that $x \leq 5$

[3 marks]



Here is a rectangle and a right-angled triangle.





All measurements are in centimetres.

The area of the rectangle is greater than the area of the triangle.

Find the set of possible values of x.

[5 marks]

Question 15

Solve
$$x^2 > 3x + 4$$

[3 marks]