

# GCSE Edexcel Math 1MA1 Inequalities

**Question Paper** 

"We will help you to achieve A Star"



(a) n is an integer.

$$-1 \leqslant n < 4$$

List the possible values of n.

[2 marks]

# **Question 2**

(c) Solve y-2 > 5

[2 marks]

# **Question 3**

(b) Solve the inequality  $8x - 3 \ge 6x + 4$ 



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

$$3p - 7 > 11$$

[2 marks]

#### **Question 5**

(b) Solve 6(x-2) > 15

[2 marks]

#### **Question 6**

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

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



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

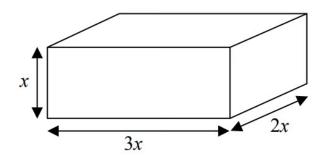
[2 marks]

# **Question 8**

Solve 6x + 4 > x + 17



Here is a cuboid.



All measurements are in centimetres.

x is an integer.

The total volume of the cuboid is less than 900 cm<sup>3</sup>

Show that  $x \leq 5$ 

[3 marks]

## **Question 10**

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



Solve 
$$2x^2 + 3x - 2 > 0$$

[3 marks]

## **Question 12**

*n* is an integer such that  $3n + 2 \le 14$  and  $\frac{6n}{n^2 + 5} > 1$ Find all the possible values of *n*.

[5 marks]

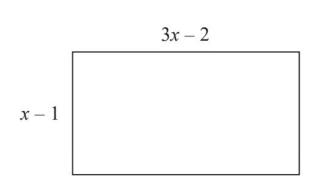
## **Question 13**

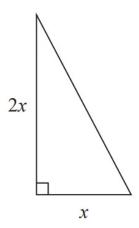
Solve the inequality  $x^2 > 3(x + 6)$ 

[4 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]