

## 1MA1 Foundation themed papers: Inequalities

Write your name here	
Surname	Other names
Centre Number	Candidate Number
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<b>Pearson Edexcel</b> <b>Level 1/Level 2 GCSE (9–1)</b>	
<b>Mathematics</b> <b>Inequalities</b>	
<b>Foundation Tier</b>	Paper Reference <b>1MA1</b>
<b>You must have:</b> Ruler graduated in centimetres and millimetres, protractor, pair of compasses, pen, HB pencil, eraser, calculator. Tracing paper may be used.	Total Marks
	<input type="text"/>

### Instructions

- Use **black** ink or ball-point pen.
- **Fill in the boxes** at the top of this page with your name, centre number and candidate number.
- Answer **all** questions.
- Answer the questions in the spaces provided – *there may be more space than you need.*
- You must **show all your working**.
- Diagrams are **NOT** accurately drawn, unless otherwise indicated.
- If your calculator does not have a  $\pi$  button, take the value of  $\pi$  to be 3.142 unless the question instructs otherwise.

### Information

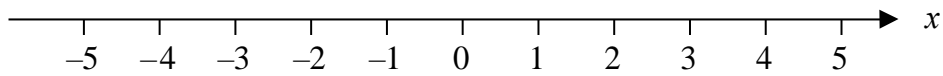
- The total mark for this paper is **26**. There are **7** questions.
- Questions have been arranged in an ascending order of mean difficulty, as found by all students in the June 2017–November 2019 examinations.
- The marks for **each** question are shown in brackets – *use this as a guide as to how much time to spend on each question.*

### Advice

- Read each question carefully before you start to answer it.
- Keep an eye on the time.
- Try to answer every question.
- Check your answers if you have time at the end.

# 1MA1 Foundation themed papers: Inequalities

- 1 (a) On the number line, show the inequality  $x < 4$



(2)

$3 < y \leq 7$  where  $y$  is an integer.

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

.....  
(2)

- (c) Solve  $3x + 5 \geq x + 17$

.....  
(3)

**(Total for Question 1 is 7 marks)**



- 2  $-3 < t \leq 2$   
 $t$  is an integer.

Write down all the possible values of  $t$ .

.....

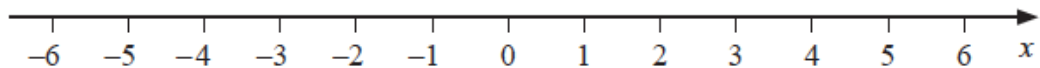
**(Total for Question 2 is 2 marks)**

**1MA1 Foundation themed papers: Inequalities**

**3** (a) Solve  $14n > 11n + 6$

.....  
(2)

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



(3)

**(Total for Question 3 is 5 marks)**

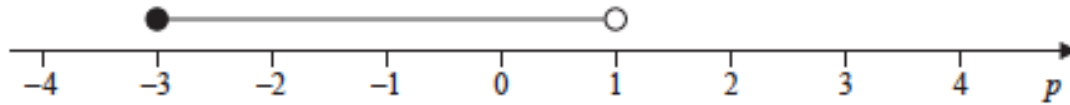
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### 1MA1 Foundation themed papers: Inequalities



4

Here is a number line.



Write down the inequality shown on the number line.

.....

**(Total for Question 4 is 2 marks)**

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5

(a) Show the inequality  $-2 \leq x < 3$  on the number line below.



(2)

(b) Solve the inequality  $4y + 7 < 16$

.....

(2)

**(Total for Question 5 is 4 marks)**

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**1MA1 Foundation themed papers: Inequalities**

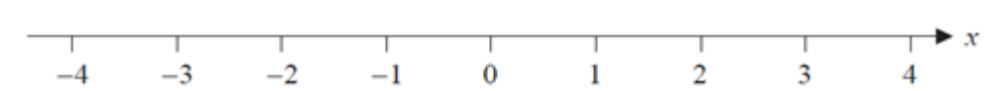


**6** Solve  $3(n - 1) < 21$

.....  
**(Total for Question 6 is 2 marks)**

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**7** Here is a number line.



(a) On this number line, show the inequality  $-2 \leq x < 3$

**(2)**

(b) Solve  $5n + 3 > 27$

.....  
**(2)**  
**(Total for Question 7 is 4 marks)**

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**TOTAL MARKS FOR PAPER: 26**