Chhetri Academy

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GCSE MATHS

Algebra

Edexcel 1MA1 | Subtopic collection Topic 21

Inequalities

Foundation tier

Past paper question booklet

11	2012-2025	Foundation
question groups	available papers	tier

Before you begin

1. Show working and use units where appropriate.
2. Use extra paper if you need more space.
3. Print at actual size (100%) for measurement questions.

Name _____ **Date** _____

Whole questions are retained for context; some parts cover other points. Legacy sources are labelled.

25 (a) n is an integer.

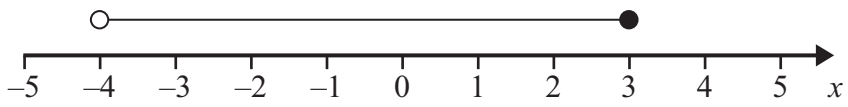
$$-1 \leqslant n < 4$$

List the possible values of n.

.....

(2)

(b)



Write down the inequality shown in the diagram.

.....

(2)

(c) Solve $3y - 2 > 5$

.....

(2)

(Total for Question 25 is 6 marks)

22 $-4 < n \leqslant 1$

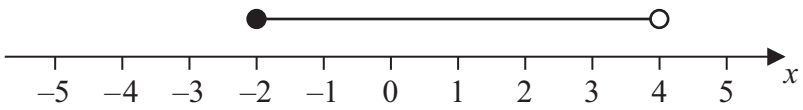
n is an integer.

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

.....

(2)

(b) Write down the inequalities represented on the number line.

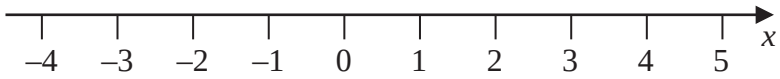


.....

(2)

(Total for Question 22 is 4 marks)

26 (a) Show the inequality $x < 3$ on the number line below.



(2)

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

.....

(2)

(Total for Question 26 is 4 marks)

23 A number, n, is rounded to 2 decimal places.
The result is 4.76

Using inequalities, write down the error interval for n.

.....

(Total for Question 23 is 2 marks)

17 (a) Factorise $4m + 12$

.....

(1)

expression	equation	formula	identity
inequality	term	factor	multiple

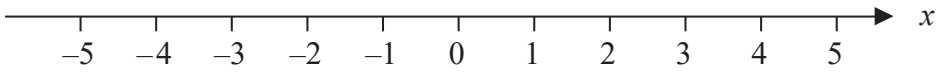
(b) Choose two words from the box above to make this statement correct.

$5y$ is a ..... in the ..... $3x + 5y$

(2)

(Total for Question 17 is 3 marks)

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



(2)

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

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

.....

(2)

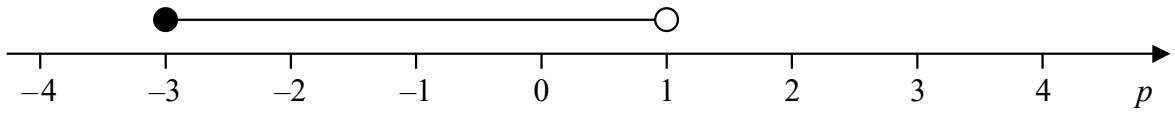
(c) Solve $3x + 5 \geqslant x + 17$

.....

(3)

(Total for Question 19 is 7 marks)

19 Here is a number line.

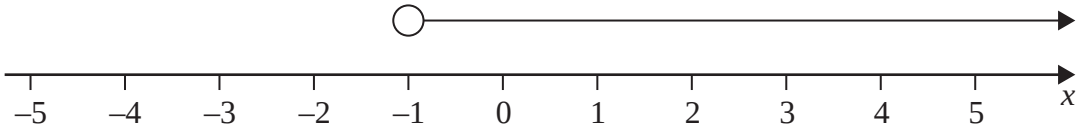


Write down the inequality shown on the number line.

.....

(Total for Question 19 is 2 marks)

21 (a) Write down the inequality shown on this number line.



.....

(1)

(b) On the number line below, show the inequality $-3 \leqslant y < 4$



(2)

(Total for Question 21 is 3 marks)

23 $-2 \leqslant n < 5$

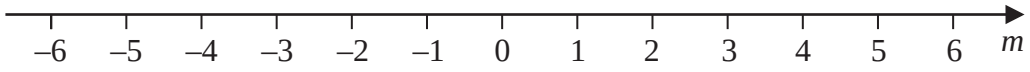
n is an integer.

(a) Write down the greatest possible value of n.

.....

(1)

(b) On the number line below, show the inequality $-4 \leqslant m < 1$



(2)

(c) Solve $\frac{2}{5}g - 4 < 6$

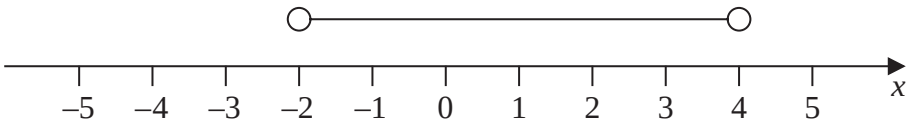
.....

(3)

(Total for Question 23 is 6 marks)

23 Jenna is asked to show the inequality $-3 < x \leqslant 4$ on a number line.

Here is her answer.



(a) Write down two mistakes Jenna has made.

1 .....

.....

2 .....

.....

(2)

(b) Work out the greatest integer that satisfies the inequality

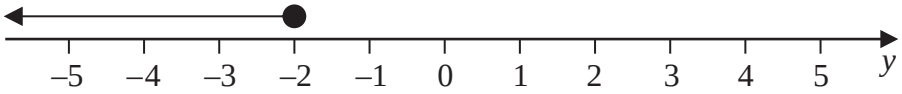
$$5y - 7 < 16$$

.....

(2)

(Total for Question 23 is 4 marks)

19 Here is an inequality in y shown on a number line.

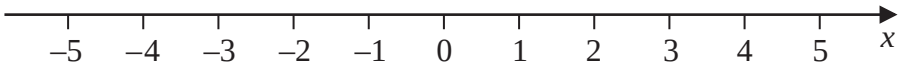


(a) Write down the largest possible integer value for y.

.....

(1)

(b) On the number line below, show the inequality $-4 \leqslant x < 2$



(2)

(Total for Question 19 is 3 marks)