

Solving inequalities with more than one step

Grade 5 | Foundation and Higher | 17 questions, 57 marks

GCSE Maths topic practice



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Name: _____ Date: _____ Score: _____ / 57

1 n is an integer.

$$-2 < n \leq 3$$

Write down all the possible values of n .

(2 marks)

Answer _____

2 Solve $4x + 3 < 19$

(2 marks)

Answer _____

3 n is an integer such that $n > -3$ and $2n + 1 \leq 5$

Write down all the possible values of n .

(2 marks)

Answer _____

4 The diagram shows an inequality on a number line.

Write down the inequality shown, using x .



(2 marks)

Answer _____

5 Solve $5x - 2 > 3x + 10$

(3 marks)

Answer _____

6 Solve $7x - 4 > 3x + 12$

(3 marks)

Answer _____

7 Solve $\frac{2x}{5} - 1 < 3$

(3 marks)

Answer _____

8 Solve $2(3x - 5) < 4(x + 1)$

(3 marks)

Answer _____

9 a. Solve $3(x - 1) \geq 6$

b. Show your solution on the number line.



(3 marks)

Answer _____

10 Solve $5 - 2x \geq 17$

(3 marks)

Answer _____

11 Chloe wants to show $x > 2$ on a number line.

She draws a solid circle at 2 with an arrow pointing to the right.

a. Explain the mistake Chloe has made.

b. Write down the greatest integer that satisfies $4x - 3 < 18$

(4 marks)

Answer _____

12 Solve $10 - 3x \leq 2x + 25$

(3 marks)

Answer _____

13 a. Solve $-3 < 2x + 1 \leq 9$

b. Write down all the integer values of x that satisfy your answer to part a.

(4 marks)

Answer _____

14 n is an integer.

n satisfies both $2n + 5 > -1$ and $4 - n \geq 1$

Write down all the possible values of n .

(4 marks)

Answer _____

15

a. n is an integer with $-4 < n \leq -1$ Write down all the possible values of n .b. Solve $7y - 3 > 2y + 22$ and show your solution on the number line.

(5 marks)

Answer _____

16

a. Solve $5 - 2x \geq 1$ b. Factorise $x^2 + 5x + 6$

(5 marks)

Answer _____

17

a. n is an integer with $-5 \leq n < -1$ Write down all the possible values of n .b. Solve $4(x + 3) > 2x + 17$

c. Write down the smallest integer that satisfies your answer to part b.

(6 marks)

Answer _____

End of questions | Total 57 marks