



THIRD SPACE  
LEARNING

# GCSE Exam Questions

Inequalities | Algebra

## GCSE Exam Questions: Inequalities

1) (a) Solve  $4x - 1 > 9$

(2)

(b) What is the smallest integer that satisfies the inequality in part (a)?

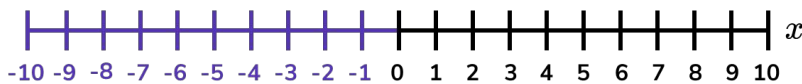
(1)

(3 marks)

2) (a) Solve  $5x - 2 < 3x + 6$

(2)

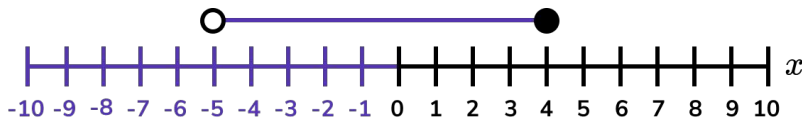
(b) Represent your solution to part (a) on a number line



(1)

(3 marks)

3) (a) Write down the inequality represented on this number line.



(2)

(b) List the integer values that are satisfied by the inequality in part (a)

(1)

(3 marks)

## GCSE Exam Questions: Inequalities



4) (a) Solve the inequality:  $x^2 + 6x - 7 \leq 0$

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(3)

(b) List the integer values that satisfy the inequality  
in part (a)

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(1)  
(4 marks)

# GCSE Exam Questions: Inequalities Answers

	Question	Answer	Marks
<b>1) (a)</b>	Solve $4x - 1 > 9$	<b>(a)</b> $4x - 1 > 9$ $4x > 10$ $x > 2.5$	<b>(1)</b> <b>(1)</b>
<b>(b)</b>	What is the smallest integer that satisfies the inequality in part (a)?	<b>(b)</b> 3	<b>(1)</b>
<b>2) (a)</b>	Solve $5x - 2 < 3x + 6$	<b>(a)</b> $5x - 2 < 3x + 6$ $2x - 2 < 6$ $2x < 8$ $x < 4$	<b>(1)</b> <b>(1)</b>
<b>(b)</b>	Represent your solution to part (a) on a number line	<b>(b)</b> 	<b>(1)</b>
<b>3) (a)</b>	Write down the inequality represented on this number line. 	<b>(a)</b> - 5 and 3 <b>seen</b> $-5 < x \leq 3$	<b>(1)</b> <b>(1)</b>
<b>(b)</b>	List the integer values that are satisfied by the inequality in part (a)	<b>(b)</b> - 4, - 3, - 2, - 1, 0, 1, 2, 3	<b>(1)</b>
<b>4) (a)</b>	Solve the inequality	<b>(a)</b> $x^2 + 6x - 7 \leq 0$ $(x + 7)(x - 1) \leq 0$ - 7 and 1 <b>seen</b> $- 7 \leq x \leq 1$	<b>(1)</b> <b>(1)</b> <b>(1)</b>
<b>(b)</b>	List the integer values that satisfy the inequality in part (a)	<b>(b)</b> - 7, - 6, - 5, - 4, - 3, - 2, - 1, 0, 1	<b>(1)</b>

# Where to go next?

For more diagnostic questions, and GCSE maths revision resources and worksheets to support students in fixing any misconceptions take a look at the free Third Space Learning [GCSE maths revision](#) pages.

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